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OCTOBER, 1894.

THE IOWA ORNITHOLOGIST.

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Devoted to
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THE IOWA ORNITHOLOGIST.

DEVOTED TO ORNITHOLOGY AND OOLOGY.

VOL. I. OCTOBER 1894. No. 1.

NOTES ON THE BIRDS OF IOWA.

The following are the observations of the active members of the I. O. A. on the family Fringillidæ (Finches, sparrows, etc.,) and Muiotillidæ. (Warbler); a few notes have been added to them, especially those of Carl Kelsey's, taken from his list of "Birds of Poweshiek County, Iowa," which was published in the September 1891, "Ornithologist and Oologist."

In the compiling of these notes I have adopted the arrangement of the American Ornithological Union, and so give the number of species as it occurs in the Union list; I have also appended, in paranthesis, the number of the species as given in Cone's Key and Check List. This is for the convenience of those who have this valuable manual.

ORDER PASSERES.

(Perching Birds.)

Birds with weak feet, usually slight bills, mostly singers.

SUBORDER OSCINES.

(Song Birds.)

FAMILY FRINGILLADAE.

(Finches, Sparrows, etc)

Feed on seeds and insects; our native species are beneficial; many species are sylvan, while others frequent the clearer fields.

514—(189.) Coccotheranstes vespertina. (Coop.)

EVENING GROSBEAK.

Winter; rarely seen; "very rare in Van Buren County, a few found in winter feeding on hackberries," (Wm. Savage); "I have not seen any since January, 1891, in Jackson County," (H. J. Giddings.)

517—194. Carpodacus perpureus. (Gmel.)

PURPLE FINCH.

Rather common in migration; throughout the state; flocks; "have met this species in Winnebago county a few times in spring, May 6, 1893, saw a very large flock; once in fall, November 11, 1893," (Rudolph M. Anderson); "have met them every spring in Jackson county; occasionally in winter," (H. J. Giddings;) "on April 4, 1891, saw a very large flock in heavy timber scattered over a number of trees; shooting off a gun produced little disturbance; took eight specimens; some in female plumage singing as well as the males in bright plumage; of those secured, three were males in bright or adult plumage,

three males in female garb and two females; Dallas county" (J. Eugene Law;) "have a male and female taken from a flock of six or eight in April. 1891; Mr. R. D. Goss, of New Sharon, has a specimen taken the year previous; these are the only cases to my knowledge of its occurrence in Mahaska county," (W. A. Bryan;) "tolerably common transient visitor in Poweshiek county," (Carl Kelsey;) "rather rare in Van Buren county; have seen them in flocks of ten or twelve in winter, at rare intervals," (Wm. Savage;) sweet singers.

521 (*199.*) Loxia curvirostra minor, (Brehm.)

AMEARICAN CROSSBILL.

(Red Crossbill.)

Sometimes very common in northern portions of the state; rare in southern parts; winter visitant; flocks; "at Garner, Hancock county, this species made their appearance in 1891, October 8, and remained until November 17, when they disappeared; during that time they were nearly as often seen as the English Sparrow; they fed especially on the sunflower seeds,"(J. Eugene Law;) "large numbers of this species have been feeding on sunflower seeds in my garden this winter, 1891; Delaware county" (H. B. A.); "not rare in late winter; noticed them quite common this spring, 1894, in Story county; W. E. Bryan reports seeing several flocks during late winter and early spring, 1893, in Mahaska county," [W. A. Bryan;) "rare transient visitor in Poweshiek county," [Carl Kelsey] "saw a flock in Van Buren county in winter 1881; have not seen any since," (Wm. Savage;) peculiar looking birds.

522—198. Loxia Cucoptera, (Gmel)

WHITE-WINGED CROSSBILL.

Very rare· "I saw one specimen of this species in Van Buren county, with the flock of American Crossbills, as noted above, but could not secure it," (Wm. Savage.]

528—(*207.*) Acanthis Linaria, (Linn.)

REDPOLL; LESSER REDPOLL.

Occasional winter visitant; flocks; "in Winnebago county; common some winters; rare in others; saw a very large flock of them February 17, 1894," [R. M. Anderson;] "have observed them in large flocks in Van Buren county; feeding on weed seeds in fields and gardens, but only in extreme cold weather; have secured a male and female and portrayed them." [Wm. Savage); "tolerably common winter visitant in Poweshiek county," (Carl Kelsey.)

529—(*213.*) Spinus Tristis, (Linn.)

AMERICAN GOLDFINCH.

Abundant throughout the state every month in the year; "resident in Winnebago county, but less common in winter, [R. M. Anderson]" "nests plentifully in Van Buren county; nesting in thistles, stalks of corn and small trees, from four to twenty feet from the ground," (Wm. Savage;") "abundant everywhere, along roads, in gardens and orchards; have taken

nests in August from thistles; Mr. G. R. Fox reported to Mahaska Ornithological Club, a nest taken in June, 1891,' [W. A. Bryan]; common summer resident in Lyons county," [Carleton R. Ball]; I secured a set of four eggs of this species September 16, 1893, nest placed in a thistle and composed of grass, fine rootlets, interwoven with cobwebs and lined with thistle down; has a very pleasing song.

533—(*212.*) Spinus Pinus. (Wils.)

PINE SISKIN.

Very rare; migrant; exceedingly rare in Van Buren county; only observed it a few times," [Wm. Savage.] "tolerably common winter visitant in Poweshiek county," [Carl Kelsey.]

534—(*219.*) Plectrophenax Invalis. (Linn.)

SNOWFLAKE; SNOW BUNTING.

Not uncommon in northern portions of the state, rare in southern parts; winter visitor in flocks; "have seen a few flocks nearly every winter in Lyons county; it remains from Dec. to March," [Carleton R. Ball]; "winter visitant in large flocks in Winnebago county," [R. M. Anderson]; this species is rather rare in Jackson county; the last flock I have seen was in the winter of 1876 and '77, during a severe snow storm," [H. J. Giddings;] "rare winter visitant in Poweshiek county," [Carl Kelsey;" "have only seen two flocks in the past thirty years in Van Buren county," [Wm. Savage]; "not common in Mahaska county; Mr. R. D. Goss reports having seen them in the extreme southern portions of the state," [W. A. Bryan.]

536—(*220.*) Calcarius Lapponicus, (Linn.)

LAPLAND LONGSPUR.

Common: fall and early winter; northern portions of the state; rare in southern parts; "common visitor in fall and winter in Winnebago county; have taken specimens in October, November and December, earliest dates October 24, 1891, November 5, 1892, November 5, 1893; large flocks," [R. M. Anderson; "never met this species in Mahaska county until January, 1894, then saw a large flock of two hundred or more for several days," [W. A. Bryan]; "quite common in Van Buren county; can easily be found in winter and early spring," (Wm. Savage.)

537—*221.* Calcarius Pictus, (Swain.

SMITH'S LONGSPUR.

This species was not reported by any of the members of the I. O. A., but Mr. Kelsey reports it as a tolerably common winter visitant in Poweshiek county. "One specimen that was secured near Des Moines on April 18, 1885, is now in the Iowa Agricultural Museum at Ames, Iowa," [W. A. Bryan.)

538—(*222.*) Calcarius Ornatus, (Towns

CHESTNUT-COLLARED LONGSPUR.

Mr. Carl Kelsey reports it as a rare winter visitant in Poweshiek county. Not recorded by any of the members of the I. O. A.

540—232. Porœetas Gramineus, (Gmel)

GRASS FINCH.

(Bay-winged Bunting,)

Common throughout the state, April to October; "arrived in Jackson county in 1894, March 22; abundant summer resident; nesting on the ground mostly in cornfields; on June 10, 1894, I found a nest in a potato patch which contained three eggs," (H. J Giddings); "summer resident; not common in Winnebago county, found one nest June 2, 1894, which contained three eggs," (R. M. Anderson;) "tolerably common summer resident in Poweshiek county." (Kelsey;) "common in migrations in Van Buren county," [Wm. Savage,] "breeds common in Lyons county, numbers have increased rapidly in the past few years; arrives in spring about the 12th of April," [Carleton R. Ball;] common summer resident in Henry county; eggs four white with specks and blotches of dull brown; nests in May, June and July on the ground, in pasture, meadow or by the roadside; birds not shy.

000—(192.) Passer Domesticus, (Linn.)

ENGLISH SPARROW.

Imported species, introduced into New York in 1850; "has been found in Lyons county for several years, but but in no great numbers; does very little damage," (Carleton R. Ball;) "abundant pest in Mahaska county; nests, and is a resident," (W. A. Bryan); eats grain, but does no great damage in the state; drives away our native birds; is very filthy about houses; it is reported that thirty young may be reared from a single pair in a season; nests about cornices, etc., about houses, in bird boxes put out for the house wren, and in every other convenient place.

542a—(227.) Ammodramus Sandwichensis Savanna, (Wils.)

SAVANNAH SPARROW.

Not uncommon; breeds plentifully in some parts; "common in Van Buren county; nesting on the ground, by a tuft of grass or large weed," (Wm. Savage); "tolerable common summer resident in Poweshiek county," (Carl Kelsey); "has a very low, insect like song.

545-(233.) Ammodrmus bairdii. (Aud.)

BAIRD'S BUNTING.

Not reported by any of the members of the I. O. A.; but Mr. Kelsey reports it as a tolerably common transient visitor in Poweshiek County.

546—(234.) Ammodramus Savannarum Passerinus, (Wils.)

GRASSHOPPER SPARROW.

Summer resident in favorite localities; "one male specimen shot in Winnebago county June 3, 1893, in an old stubble field," (R. M. Anderson:) "A summer resident in Dallas county," (J. Eugene Law:) "breeds quite plentiful in Buena Vista county: nesting in the dry grass on the prairie: nests often roofed over: eggs three to six," (John V. Crone:) "rare summer resident in Lyons county: one set of five eggs taken June 29, 1891: nest placed under a 'shoe string' or 'lead plant':" (Amorpha canescens) on

high rolling prairie: have seen a few birds in the nesting season every year since then, but have never found another nest," (Carleton R. Ball): "have observed this species fairly common in the fall of the year in Mahaska county," (*W.* A. Bryan): this sparrow is also called the yellow-winged and cricket sparrow.

547—(*236.*) Ammodramus Henslowii. (Aud.)

HENSLOW'S SPARROW.

Not uncommon in northern portions of the state; summer resident; rare in southern parts; "tolerably common summer resident in Poweshiek County" (Carl Kelsey); "Messrs. Keyes and Williams record it as a common summer resident in Iowa. Mr. L. Jones informs me that in Iowa the favorite resort of this Sparrow during the breeding season are neglected fields and pasture lands. Its nest is placed on the ground, sometimes in a slight depression, beneath a tussock of grass; the composition is of fine and coarse grasses, with a few cow hairs. The eggs, Mr. Jones says, are deposited about May 25th." (Davie's "Nest and eggs of North American Birds.")

548—(*237.*) Ammodramus leconteii. (Aud.)

LE CONTE'S SPARROW.

"One specimen of this species was taken in Polk County on April 19th, 1886, and is now in the Iowa Agricultural Museum at Ames, Iowa." (W. A. Bryan.)

552—(*281*). Chondestes grammacus. (Say.)

LARK SPARROW.

Abundant; throughout the state; May to October; "summer resident in Winnebago County; very common" (R. M. Anderson); "abundant summer resident in Van Buren County" (William Savage); "arrived in Jackson County in 1894, May 2nd; found a nest June 10th, 1894 which contained four eggs and one of the Cow Birds' eggs; nest placed on the ground in potato patch" (Mr. J. Giddings); "abundant in Mahaska County" (W. A. Bryan); two broods in a season; nests in May, June and July; eggs four or five, white with irregular lines of black and brown; nests always placed on the ground.

553—(*282.*) Zonotrichia querula. (Nutt.)

HARRIS' SPARROW.

Rare; migrant; more plentiful in the northern portions of the state; "very rare in Van Buren County; captured a male and female in 1892, the first I had seen in the county" (William Savage); "tolerably common transient visitor in Poweshiek County" [Carl Kelsey]; "not so rare as a migrant in *W*innebago County; have seen them in September and October quite often; in October I have heard them give a quite loud rather and pleasing song, of a few notes, repeated at short intervals; did not remember of seeing any in the spring, but reference to my note book shows this species as seen May 12th, 1894" [R. M. Anderson.]

557—(*276*) Zonotrichia leucaphrys. (Forst.)

WHITE CROWNED SPARROW.

Rather rare; migrant; one of our most brilliant Sparrows; sexes dissimilar; female being much duller than male; arrive in Van Buren County about the first of April passing to the north in two or three weeks; are not plentiful, but are found in flocks with "Zonotrichia albicollis;" have seldom seen them in the fall; they inhabit thickets and hedge-rows; have a very pleasing song, but it is rather low; are not shy, but require close observation to distinguish them from the "White-throated Sparrow" [W. G. Savage]; "migrant in Dallas County" [J. Eugene Law]; "have taken specimens in Mahaska County" [W. A. Bryan]; "tolerably common transient visitor in Poweshiek County" [Carl Kelsey]; generally found singly or in pairs.

558—(*275*) Zonotrichia albicollis. (Gmel)

WHITE THROATED SPARROW.

Abundant; throughout the state; September and October, April and May; migrant; flocks; "common in Winnebago County as a migrant; in late April and early May, also in October" [R. M. Anderson]; abundant migrant in Jackson County; does not breed here; arrived in 1894, April 17th and remained until May 13th, during which time it was more numerous than any other species of birds in this immediate vicinity" [H. J. Giddings]; "migrant in Dallas County" [J. Eugene Law]; "our most beautiful Sparrow; arrives in Van Buren County about the last of March and remains five or six weeks, then passes to the north, returning about the middle of September; inhabits low thickets; very plentiful while here" [W. G. Savage]; "common transient visitor in Poweshiek County" [Carl Kelsey]; "visits us in large numbers in spring and fall migration; Van Buren County" [William Savage.]

559—(*268*.) Spizella monticola. (Gmel)

TREE SPARROW.

Very common throughout the state; "winter resident in Jackson County; tolerably common; departs for the north about the first of April" [H. J. Giddings]; "common in the first and last months of winter in Buena Vista County; may stay all winter; noted a flock on January 31st, 1891, which would indicate winter residence" [Jno. V. Crone]; "common winter resident in Winnebago County, but more plentiful in the migrating season" [R. M. Anderson]; "common in winter in Dallas County" [J. Eugene Law]; "the most abundant of winter visitors in Mahaska County; comes in November and leaves in March" [W. A. Bryan]; common winter visitant in Poweshiek County" [Carl Kelsey]; winter resident; October to April; flocks.

560—(*269*.) Spizella socialis. (Wils.)

CHIPPING SPARROW.

Very common; throughout the state; April to October; "an abundant and interesting species in Mahaska County; nests may be found in hedges, evergreens, etc." [W. A.

Bryan]; "is becoming common in Lyons County; absence heretofore due to lack of suitable nesting sites, I think; have taken sets" [Carleton R. Ball]; summer "resident in Winnebago County; nesting in trees near houses" [R. M. Anderson]; "arrives in Van Buren County about the middle of April; they generally prefer to nest near the abode of man, in a briar thicket or small tree, from two to twenty five feet above the ground; has a very low song; sounds much like an insect" [W. G. Savage]; common summer resident in Poweshiek County" [Carl Kelsey]; "eggs three to five, bluish-green with specks of black about the larger end; nesting on thistles, in bushes and small trees; one of our best known and most friendly Sparrows.

561—(*272.*) Spizella pallida. (Swain.)

CLAY-COLORED SPARROW.

Rare; throughout the state; nests in the northern portions; "have not met this species, but in Davie's "Nest and Eggs of North American Birds," J. W. Preston is mentioned as having found it breeding in Winnebago County, Iowa, in June, 1885; it frequented the edges of brush and borders of timber. The nests were placed on the ground; one however, was built in the branches of a low hazel. The materials used in the construction of the nests were fine, round grasses and blades, with a lining of hairs. The eggs were three to five, commonly three or four, the latter number predominating, they are similar in color to those of the Chipping Sparrow, and average about the same in size, 65x50" [R. M. Anderson]; "a tolerably common transient visitor in Poweshiek County" (Carl Kelsey); rather rare in Jackson County; a few nesting in that county; arrives about the middle of April" (H. J. Giddings); "very rare in Van Buren County; secured one specimen on May 9th, 1891" (William Savage.)

563—(*271.*) Spizella pusilla. (Wils.)

FIELD SPARROW.

Abundant; throughout the state; April to November; more shy than "Spizella socialis"; "common summer resident in Jackson County; arrived March 23rd, 1894; on May 8th, 1894 I found a nest of this species, placed in a tussock of grass, about two inches above the ground; it contained six eggs, which I think is unusual, four being the most common number in a set" (H. J. Giddings); "abundant in Van Buren County; nesting in low bushes; I secured an albino of this species a few years ago" [William Savage]; "common summer resident in Poweshiek County" (Kelsey); arrives in Van Buren County about the first of April; nests very near the ground in low bushes or tussock of grass; has rather a low little song, yet it can be heard quite a distance; sings any time in the day" (W. G. Savage); two broods are often reared in a season; eggs three to five, grayish white specked with brown; nests placed on the ground or I have found it in a hedge four feet above the ground.

567—(*261.*) Junco hyemalis. (Linn.)

SLATE COLORED JUNCO.

Very common; migrant in northern portions of the state; winter resident in southern parts; flocks; October to April; "migrant in Winnebago County; plentiful in March, April and early May, also in October and November" (R. M. Anderson); quite an abundant winter visitant in Mahaska County; found often in flocks with "Spizella montecola" " (W. A. Bryan); common winter visitor in Poweshiek County" (F. L. Owens); "very abundant in Van Buren County; arrives early in October and departs late in April" (William Savage.)

581—(*244*). Melospiza fasciata. (Gmel.)

SONG SPARROW.

Quite common; breeds from the central portion of the state; "common in Jackson county; nesting in favorite localities, along the water courses; does not winter here, but is one of the first birds to arrive in the spring, arrived March 9th, 1894," [H. J. Giddings.] "Summer resident in Winnebago county; abundant, arriving early in spring; have found nests in May, June and July," [R. M. Anderson.] "Quite common in Van Buren county; spring, fall and winter resident," [William Savage.] "Common winter visitant in Poweshiek county," [Carl Kelsey.] Beautiful singer, a great favorite with all lovers of nature.

583—(*642.*) Melospiza lincoln. (Aud.)

LINCOLN'S SPARROW.

Very rare; migrant; "shot one specimen in Winnebago county on September 24th, and another on September 29th, 1892; others noticed in the county," [R. M. Anderson.] "One specimen taken in Marion county on May 12th, 1885, and is now in the Iowa Agricultural Museum at Ames," (W. A. Bryan.) "Not uncommon in both migrations in Lyons county," (C. R. Ball.)

584—(*243*) Melospiza georgina. (Lath.)

SWAMP SPARROW.

Not rare; probably throughout the state; summer resident; "common in the swamps along the Mississippi River, and I think nests in Jackson county; have never found nests," (H. J. Giddings.) "Tolerably common transient visitor in Poweshiek county," (Carl Kelsey.) "Common in Van Buren county; a few nesting here," (William Savage.)

585—(*282.*) Passerella illaca. (Merr.)

FOX-COLORED SPARROW.

Common; throughout the state; migrant; "shot a specimen in Buena Vista county on March 30th, 1891; have since observed them to be common in its spring migration," (Jno. V. Crone.) "A common spring and fall migrant in Winnebago county; earliest date I have seen them in the fall was, September 27th, 1892, earliest late in the spring April 1st, 1893," (R. M. Anderson.) "Common migrant in Jackson county; first seen in 1894 was on March 13th and the last one was on April 16th," (H. J. Giddings.) "Tolerably common transient visitor in Poweshiek county," (Carl Kelsey.) "Common and very early spring

migrant in Van Buren county," (William Savage.) "Shot a male on October 8th, 1892 from a flock of eight, rather common migrant in Lyons county," (C. R. Ball.) "Migrant in Mahaska county; common in tall grass along rail-roads," [W. A. Bryan.]

587- (*301*) Pipilo erythrophthalmus. (Linn.)

TOWHEE.

Very common; throughout the state in suitable localities; "quite common summer resident in Mahaska county; inhabits quite open woods," (W. A. Bryan.) "Have seen a few in spring and fall in Winnebago county; none in summer," (R. M. Anderson.) "Common summer resident in Van Buren county; nests on the ground; a few stay throughout the winter," (William Savage.) Mr. Fred Hamlin, of Perry, Dallas county reports finding a nest of this species on July 24th, 1894, which was placed in a grape vine eight feet from the ground. The eggs are three to five, usually grayish or pinkish white, specked with reddish-brown; nests in May, June and July.

BREAKS THE RECORD.

A nest of "Pipilo erythrophthalmus" placed fourteen feet from the ground, in an oak tree which had a wild grape vine twining about it; the nest was placed on a horizontal limb, five feet from the trunk of the tree, and composed of leaves, corn-husks, weed-stems and grass, lined with fine grass, the whole making quite a bulky nest. It was found on August 5th, 1894, and at that date contained two young birds which were nearly half-fledged. The old male Towhee was near the nest, and the female on the nest when it was first found. Mr. William and W. G. Savage, William Edwards and David L. Savage (all interested in the study of birds,) were present when the nest was found, it is undecided which saw the nest first, but each one can testify that the identity is sure.

The Cowbird often lays its eggs in this birds' nest. I have found as many as five of the Cowbird's eggs in a single nest of the Towhee.

593 [*299*] Cardinalis cardinalis. (Linn.)

CARDINAL GROSBEAK.

Common in southern portions of the state; not reported in northern parts; "on March 27th, 1894, I shot a fine male specimen of this species; have it mounted in my collection; this is the first one secured in Jackson county, that I know of," (H. J. Giddings.) "Very common in Mahaska county; nesting in low bushes," [W. A. Bryan.] "Common but not abundant in Van Buren county; nests are are very poorly built, and usually about six feet above the ground in thorn bushes; it is a resident," [William Savage.]

595—(*289*. Habia ludoviciana. (Linn.)

ROSE-BREASTED GROSBEAK.

Common throughout the state; May to September; sweet singer; "abundant summer resident in Winnebago county nesting in trees almost anywhere," [R. M. Anderson.] "Com-

mon in open woods in Mahaska county; builds an open nest, resembling that of the Mourning Dove," [W. A. Bryan.] "Very common in Jackson county; has greatly increased in the past fifteen years; it was formerly quite rare," [H. J. Giddings.] "Common in Van Buren county; nesting in trees fifteen or twenty feet high," [William Savage.] Nests in May and June; eggs three to five, bluish-green, dotted with brown.

598—(*295*.) Passerina cyanea. (Linn.)

INDIGO BUNTING.

Common throughout the state; May to September; "summer resident; common in Winnebago county," (R. M. Anderson.) "Not a common summer resident in Mahaska county" [W. A. Bryan.] "Very common in Van Buren county; nesting in low bushes," [William Savage.] "Common summer resident in Poweshiek county," [Carl Kelsey.] "A very common Finch in Van Buren county; arrives early in May and departs early in September; nests are placed about two inches from the ground in small bushes; if disturbed they will build the second and third in a season; has a very pleasing song, which is uttered from the top of some tree or bush; not shy; so netimes nests very near the abode of man," [W. G. Savage.] Eggs three to five, usually four, white, with a bluish tinge.

604—(*287*.) Spiza americana. (Gmel.)

DICKCISSEL.

Also called Black-throated Bunting; common; throughout the state; May to August; formerly rare; "abundant summer resident in Minnebago county; nests in June, July and August," [R. M. Anderson.] "Common in Lyons county; nesting in hedges, bushes and tall grass," [Carleton R. Ball.] "Very common in Mahaska county," [M. A. Bryan.] "Common summer resident in Van Buren county; nesting in hedges or on the ground in the prairie," [William Savage.] Eggs four or five, greenish-blue, nearly the size and color of the eggs of the Blue Bird; usually nests on the ground in Henry county; sings in the night sometimes.

FAMILY MNIOTILTIDAE
WARBLERS.

Small birds; often sweet singers; usually beautiful; mostly insectivorous; eggs almost always bluish white or cream colored specked with brown.

636—[*92,91*] Mniotilta varia. (Linn.)

BLACK AND WHITE WARBLER.

Common; throughout the state; migrant. "Secured a specimen of this species September 11, 1894 in Dallas county" [J. Eugene Law.] "Common migrant in Winnebago county; May and August," [R. M. Anderson.] "Not common in Mahaska county," (W. A. Bryan.) "Tolerably common migrant in Van Buren county" [William Savage.] "Song very low but sweet and resembles the words, "See-thee, see-thee, see-dee," and as slender to the ear as hair-wire to the eye, but so peculiar, so tender, so musical, as even to soften and sweeten surrounding nature. This species remind one

of the Creepers and Titmice in its manner of climbing around the branches.

637—(*95*) Protonotaria citrea. (Bodd.)

PROTHONOTARY WARBLER.

Messrs Keyes and Williams record it as a common summer resident of Iowa, and not uncommon especially in the eastern part of the state. "Arrives in Van Buren county about the middle of May and departs toward the latter part of July; very shy; not very plentiful; found about ponds, lakes and swamps in dense, low, bushy and grassy places; seldom if ever is this species seen in the tree-tops, even in the migrating season; its notes are hardly worth the name of song, [W. G. Savage.] "Nests in the deserted hole of the Downy Woodpecker or Chick-a-dee; the stump selected usually stands in or projects over the water." (Davie's "Nest and Eggs of North American Birds"]

639—(*96*) Helmitherous vermivorous. (Gmel.)

WORM-EATING WARBLER

Rare; summer resident in southern portions of the state; not reported in northern parts. "Rare summer resident in Van Buren county, (William Savage.) "I found a nest of this species in Henry county on May, 25, 1892, it was placed on a hillside in dense woods, composed of leaves, lined with hair-like moss and horse hairs. The eggs were five in number and measured .71x.55, .72x.57, .71x-.58, .76x.55, .77x.56, a creamy white dotted with red and brown.

641—(*98*) Helminthrophila pinus. (Linn.)

BLUE WINGED YELLOW WARBLER.

Rare throughout the state; summer resident; May to August; "observe this species at different times throughout the season in Mahaska county; probably breeds," (W. A. Bryan;) "tolerably common summer resident in Powshiek county" (Carl Kelsey;) "common in Van Buren county; arrives about the last week in April and stays throughout the summer; has a low and not very pleasing song; sings often at noon-day when most other birds are hushed and the scorching hot sun is pouring forth its hottest rays," (W. S. Savage:) "I found a nest of this species in Henry county on June 2, 1893, which contained three of its own eggs and two of the Cowbird's; the nest was placed in a clump of May-apples and was nearly on the ground, only about an inch above it, upheld by the stems of the May apples; it was composed entirely of leaves and lined with hair; has a very feeble song; a decided insect tone about it; eggs, three to five, white, sparsely sprinkled at the larger end with dots of reddish-brown.

642—(*102*) Helminthrophila chrysoptera (Linn.)

GOLDEN-WINGED WARBLER.

Not recorded by any of the members of the I. O. A., but in Davie's "Nest and Eggs of North American Birds" it is reported as breeding in limited numbers in the bottom lands in western Illinois, along the Mississippi River; hence I believe it is found in Iowa, although I have no positive evidence of such being the case.

645--(*106*) Helminthrophila ruficapilla. (Wils.)

NASHVILLE WARBLER.

Not common; May; migrant; "shot one specimen in May, 1892, in Winnebago county," (R. M. Anderson.) "Not rare transient visitor in Van Buren county" (William Savage.) "Tolerably common migrant in Poweshiek county, (Carl Kelsey.)

646—(*107.*) Helminthrophila celate (Say.)

ORANGE-CROWNED WARBLER.

Rare; May and September; migrant in Winnebago county; one specimen taken *May* 21, 1892; two taken October 1, 1892," [R. M. Anderson.] "Very rare migrant in Van Buren county," [*William* Savage.] "Tolerably common migrant in Poweshiek county," [Carl Kelsey.]

647—[*109*] Helminthrophila peregrina [Wils.]

TENNESSEE *WARBLER.*

"Not uncommon; migrant; quite common in *Winnebago* county this spring, 1894." [*W.* A. Bryan.] "Arrives in Van Buren county about the middle of *May*, stays about a week, and then passes to the north. They are quite plentiful while here; found in the tree-tops, sometimes on the lower bushes, but never on the ground; has a very low song, but is constantly twittering," [*W.* G. Savage.] "Quite common migrant in Jackson county; arrived *May* 11, 1894," [H. J. Giddings.]

648 [*93*] Compsothlypis Americana. [Linn.]

PARULA *WARBLER.*

Also called Blue Yellow-backed Warbler; not rare; migrant. "Rare migrant in Jackson county; does not nest here; very few seen last spring, onlynoted on two days, *May* 11 and. 12, 1894, [H. J. Giddings,] A tolerably common transient visitor in Poweshiek county, [Carl Kelsey.] May breed in the state, as it has been noted as nesting as far south as Missouri.

650—(*126*) Dendroica tigrina. (Gmel.)

CAPE MAY WARBLER.

Very rare, migrant; throughout the state. "Rare in Van Buren county; have only taken a few specimens," [William Savage.] Not uncommon in Poweshiek county as a migrant," [Carl Kelsey.]

652—[*111*] Dendroica aestiva. [Gmel.]

YELLOW *WARBLER.*

Our only plentiful summer resident among the warblers; April to September. "Nests abundantly in Lyons county; appears in the spring about May 10 and leaves by August 20, usually," [Careton R. Ball.] "This species is abundant in Fayette county," (W. W. Loomis.) "Nests abundant in *Winnebago* county," [R. M. Anderson.] "Most common species in the family Minnotiltidae in Mahaska county; nesting in berry patches, hazel brush, currant bushes, etc. builds a beautiful nest, [W. A. Bryan.] "Very abundant in Buena Vista county; nesting in small trees and bushes; eggs, three to five; nests often contain eggs of the Cowbird; have found double nests of this species with Cowbird eggs in the lower story, [Jno. V. Crone.] "Plentiful

in Van Buren county, arriving about the first of May and departing toward the last of August; staying just long enough to rear its young; nesting in small trees about 15 feet high; not very shy; sometimes nests within a short distance of the residence of man; song low but very pleasing, [W. G. Savage.] Arrived in Henry county in 1894 April 29. I saw a female of this species feeding a young Cowbird October 2, 1893; eggs, four, usually yellowish white or greenish gray with specks of brown.

6 4—(117.) Dendroica caeruleacens (Gmel.)

BLACK-THROATED BLUE WARBLER.

Rare; migrant. "Shot a male specimen on May 14, 1892 in Winnebago county," [R. M. Anderson.] Not reported by any other member of the I. O. A.

655—[119] Dendroica coronata. (Linn.)

MYRTLE WARBLER.

Very common; migrant; the earliest Warbler to arrive in the spring "Abundant for a long time in spring and fall; earliest dates, April 14, 1893 and Sept. 30, 1893, Winnebago county," [R. M. Anderson.] "Quite common migrant in Mahaska county," [W. A. Bryan.] "Arrived in Jackson county April 17, 1894 and remained until May 3." [H. J. Giddings.] "Very common migrant in Van Buren county" [Wm. Savage.] They arrive in Henry county by April 15, usually.

657—(125.) Dendroica maculosa. (Gmel.)

MAGNOLIA WARBLER.

Rare, migrant; a beautiful species, "Migrant in May; frequent in Winnebago county, [R. *M.* Anderson.] "Tolerably common transient visitor in Poweshiek county." [Kelsey.] "Rare migrant in Van Buren county, have specimens taken May 11, 1893 and May 13, 1894, [Wm. Savage.]

658—(118) Dendroica caeculae. (Wils.)

CERULEAN WARBLER.

"Not uncommon, migrant; notice quite a number of this species near the college in Story county this spring '94 and took specimens," [W. A. Byran.] "Tolerably common transient visitor in Poweshiek county," [Kelsey.] Quite common migrant in Van Buren county," [Wm. Savage.] Inhabits the tree tops.

659—(124) Dendroica Pennsylvanica. (Linn.)

CHESTNUT-SIDED WARBLER.

Very common migrant; a few breed in the state. "Spring migrant, common in Winnebago county," [R. M. Anderson.] "Noted quite common in May 1892 in Mahaska county." (W. A. Bryan.] "A common migrant in Jackson county; a few breed here; never found a nest in this county but on July 1 '94, I saw a female of this species feeding a young cow-bird; also saw a pair of them in this same grove in June 1894., which I think prove that they breed here," [H. J. Giddings.) "I have a set of two eggs of this species taken in Pottawattamie county," [Ernest Irons.] "Have not observed it to be more than a migrant in Dallas county, [J. Eugene Law] "Very common in Van Buren county; arrives about the first of May and stays throughout the summer, building its nest in some small tree, six or

eight feet high; nests in June; has a very pleasant song; not shy; female much duller than male, (W. G. Savage.) Eggs four or five, white or creamy-white, speckled with rusty brown and chestnut.

660—(*123*) Dendroica Castanea. (Wils.)

BAY BREASTED WARBLER.

Rather rare; migrant. "Tolerably common migrant in Jackson county; does not breed here; observed from May 11-19, '94, (H. J. Giddings. "Rare transient visitor in Van Buren county," [Wm. Savage.]

661—(*122*) Dendroica striata. (Forst.)

BLACK-POLL WARBLER.

Common migrant. "Spring migrant; not rare in Winnebago county" (R. M. Anderson.) "Not very plentiful in Van Buren county; arrives about the first of May and remains very nearly a month, then they all disappear and are seldom seen in the fall; has a very pleasing song; very shy; often in company with other warblers," (W. G. Savage.) Tolerably common transient visitor in Poweshiek county, (Carl Kelsey.)

A RARE FIND.

On May 20th, 1894, Mr. Fred Hamlin found a nest of this species in Dallas county, Iowa. The nest was composed of grass and hair (hair being the main material), and was placed ten inches off the ground in a small thorn bush. The bush was only one rod from the banks of the Raccoon River.

The eggs, were four in number, white, with a greenish tinge, and one egg is finely specked with markings of reddish brown, thickest at the larger end but not forming a ring, the rest range from this to the heaviest marked one, which has specks a little larger than a pin head, many obscure markings on the eggs, which give them a purpleish tinge. The eggs measure 66x51, 64x51, 64x52, 63x52.

Mr. Hamlin spent about three hours in the capture of the female; male not seen.

This was a very rare find, as this species rarely builds in Minnesota. The first record of its nesting in Iowa.

662—(*121.*) Dendroica blackburniæ. (Gmel.)

BLACKBURNIAN WARBLER.

Rare; migrant; "spring migrant; not rare in Winnebago county" (R. M. Anderson.) "Spring and fall migrant in Jackson county; some seasons quite common and in others very rare" (H. J. Giddings.) "Rare transient visitor in Van Buren county" (William Savage.)

667—(*112.*) Dendrosica virens. (Gmel.)

BLACK-THROATED GREEN WARBLER.

Rare throughout the state; migrant; "spring migrant in Winnebago county; not common" (R. M. Anderson.) "A rare transient visitor in Van Buren county" (William Savage.)

627—(*132.*) Dendroica palmarum. (Gmel.)

PALM WARBLER.

Not common; migrant; "common as a migrant in early May in Winnebago county" (R. M. Anderson.) "Not rare in Van Buren county" (William Savage.) "A tolerably com-

mon transient visitor in Poweshiek county" (Kelsey.)

674—(135.) Seiurus aurocapillus. (Linn.)

OVEN BIRD.

Common throughou the state; "common in Jackson county; nesting here, nests are very hard to find; arrives rather early for a warbler and departs about the first of August" (H. J. Giddings.) "A summer resident in Winnebago county, not rare" [R. M. Anderson.) "Have not observed this species as as common in Mahaska county" (W. A. Bryan.) "A common summer resident in Van Buren county" (William Savage.) "Common in Poweshiek county; summer resident" (Kelsey.) Nests are placed on the ground and are oven shaped, from this we get the common name of the bird; April to September; nests in June; eggs four to six, creamy-white, with spots and markings of reddish brown. This species is often the foster parent of the cow-bird.

675—(136.) Seiurus noveboraceusis. (Gmel.)

WATER THRUSH.

Rare; a few breed in the state; "I have found their nests in Van Buren county" (William Savage.) In Iowa, near Des Moines, according to Messrs. Keyes and Williams, a female was seen feeding its young in June, 1881. I have observed it as a migrant in Henry county.

675a—(137.) Seiurus noveboraceusis notabilis. (Grinn.)

GRINNELL'S WATER THRUSH,

Not reported by any of the members of the I. O. A.; Mr. Carl Kelsey reports it as a tolerably common summer resident in Poweshiek county.

676—(138.) Seiurus motacilla. (Nieill.)

LOUISANA WATER THRUSH,

Rare; emigrant; "one specimen taken in Polk county. May 22nd, 1885, and is now in the Iowa Agricultural Museum at Ames" (W. A. Bryan.) "A few remain to beed in Iowa" (Davie's "Nest and Eggs.")

677—(140.) Geothlypis formosa. (Wils.)

KENTUCKY WARBLER.

Rather rare; breeds in some parts of the state; "tolerably common summer resident in Poweshiek county" [Kelsey.] "Not common in Van Buren county, have not found it neting" [William Savage.] "I found a nest of this species in the early part of June, 1894; it was placed in a buck-berry bush about three inches above the ground, and contained four young only a few days old; Van Buren county" [W. G. Savage.]

678—(139.) Geothylypis agilis. (Wils.)

CONNECTICUTT WARBLER.

Exceedingly rare; this specimen is only reported by William Savage; he says "I have taken a few specimens in Van Buren county; rare."

679—[140.] Geothypis philadelphia. [Wils.]

MORNING WARBLER.

Very rare; migrant: "a rare transient visitor in Van Buren county" [William Savage.]

681a—(141.) Geothlypis trichas occidentalis.

WESTERN YELLOW THROAT.

Very common throughout the state;

May to August; all the records relating to the Maryland Yellow-throat have been brought under heading of the present sub-species; as the habitat of "Geothlypis trichas" is entirely east of the Mississppi River; "summer resident in Winnebago county; abundant; have found nests" (R. M. Anderson.) "This is a very common species in Mahaska county; near grassy sloughs and along road sides; can almost be identified by its peculiar flight" [W. A. Bryan.] "Usually quite common in Jackson county, but this season it has been almost rare; arrived May 7th, 1894." [H. J. Giddings.] "Common summer resident in Poweshiek county" [Kelsey.] "Very common in Van Buren county" [William Savage.] Nests in May and June in low thickets or on the ground; eggs four to six, creamy white, specked with reddish brown; nests often arched over; one of our sweet singers.

683—(*144.*) Icteria virens. (Linn.)

YELLOW BREASTED CHAT.

Quite common; especially in the southern part of the state; May to August; "have not found it in Winnebago county; have one specimen that was taken in Cerro Gordo county May 30, 1891" [R. M. Anderson.] "Quite common in the brushy uplands in Mahaska county; nesting" [W. A. Bryan.] "A very common summer bird resident in Van Buren county" [William Savage.] "Common in Poweshiek county; summer resident" [Kelsey.] Nests in low bushes, two to five feet above the ground; eggs four. In the nesting season this species is the noisiest bird in the woods, at which time it may be observed in its wonderful aerial evolutions, uttering its medley of sputtering, cackling, whispering and scolding notes, interluded with long whistles.

685—[*147.*] Sylvania pusilla. [Wils.]

WILSONS WARBLER.

Rare; migrant; "saw one specimen on May 21st, 1893, in Winnebago county" [R. M. Anderson.] "Tolerably common transient visitor in Poweshiek county" [Kelsey.] "One specimen taken on May 11th, 1885 in Polk county, and is now in the Museum of the Iowa Agricultural College at Ames" [W. A Bryan.]

686—[*149.*] Sylvania canadensis. [Linn.]

CANADIAN WARBLER.

Rare; migrant; "common migrant in the latter part of August, one specimen taken May 27th, 1894, in Winnebago county" [R. M. Anderson.] "A rare migrant in Van Buren county" [William Savage.] "Tolerably common transient visitor in Poweshiek county" [Kelsey.]

687—(*152*) Setophaga ruticilla. (Linn.)

AMERICAN REDSTART.

Common throughout the state from May to August. "Abundant summer resident in Winnebago county" [R. M. Anderson.] "On June 14, '93, I took sets of $\frac{1}{2}$, 6 4 and 1-5 of this species in Cerro Gordo county, incubation advanced," [J. Eugene Law.] "This species I had supposed to be a rare summer resident in Jackson county until August 4, '94 I took a ramble near the mouth of the Maquaketo river and in the timber near its banks I found specimens of both

old and young of this species very plentiful; arrived May 8, '94," [H. J. Giddings.] "Common summer resident in Van Buren county." [Wm. Savage.] "Very plentiful in Fayette county," [W. W. Loomis.] Nests in June in small trees from twelve to twenty feet from the ground; eggs four or five, white or grayish white with markings of brown; beautiful bird.

DAVID L. SAVAGE, Compiler.

In a recent letter from J. Eugene Law, Perry, Ia., he speaks of taking a specimen of the Pine creeping Warbler [Dendroica vigorsii] on Sept. 11, 1894. This species is very rare in the state and was not reported by any of the other members of the I. O. A.

THE CROSSBILL IN IOWA.

My acquaintance with the American Crossbill began in the fall and winter of '84. I was then living in DeWitt, in the eastern part of this state. In our yard there were several large evergreen trees, and in these the Crossbills would spend a goodly part of each day, as long as the flock stayed in that vicinity. The fall of '84 is as early as I remember seeing the birds, but each fall and winter after that up to '88, when we moved from the place the Crossbills were, regular winter visitors. Sometimes they would stay in the vicinity as long as two weeks, so I managed to see a good deal of them. Our house was so situated that a balcony extended to within a few feet of the branches of two large evergreens, and from this place I have watched the birds for hours at a time. Cones were very numerous on these two trees, which made it a favorite resort.

While feeding, the Crossbill is very intent upon its work, and does not seem to care "which end up" it is. They cling to the cones in all manner of positions, and a person may approach quite close to a flock without startling the birds. The lower branches of these trees were not over five feet from the ground, and I have often approached to within easy reach of the Crossbills, but on the least suspicious movement the whole flock rises, uttering a sharp, peculiar cry of one syllable. Ordinarily when so startled, the flock settles in the near neighborhood after making a few circles overhead.

The largest flock I ever saw numbered about fifty, the usual number being twenty-five or thirty and in all the flocks I have seen, I notice that generally about two-thirds of the birds are females. Formerly I thought these birds must be kept on very short rations, as the seeds are so hard to extract from the cones, but upon examining the stomachs of several specimens I found that I was much mistaken. They were literally stuffed with seeds. Their peculiar shaped bill is adapted to this particular purpose, and when the Crossbill gets to work in earnest, it makes the chips fly.

After leaving DeWitt, I did not see the Crossbill until the fall of '90, when we moved to Hampton. Here I again renewed my acquaintance with the bird. I saw a small flock

in November 1890, and flocks of about twenty on Nov. 15th and Dec. 5th '91. This year ['92] a flock of about twenty-five has been in the vicinity and I have seen the birds almost every day during the last week of Jauuary and first of February.

One thing I noticed in the Crossbill this month which is new to me, I saw a flock feeding on ash seeds, picking them from the ground under a tree. I had supposed their food to consist entirely of cone seeds.

To conclude with I will say, the Crossbill is in my estimation a very model of industry and one which I much admire.

FRANK H. SHOEMAKER,
Hampton, Iowa.

From March 1892 "Oologist."

BIRD MIGRATION IN THE MISSISSIPPI VALLEY.

The following list of Sparrows and Warblers is quoted from Bulletin No. 2 Division of Economic Ornithology entitled "Bird Migration in the Mississippi Valley for 1884-5" and includes only those species reported from Iowa stations, together with such brief notes as were deemed of value to Iowa Ornitholigists.

A. O. U. Fringillidae.

514. Coccothraustes Verpertina.

EVENING GROSSBEAK.

Rare winter resident.

515. Pinicola enucleator

PINE GROSBEAK.

"Reported from Mitchell county."

517. Carpodacus purpureus.

PURPLE FINCH.

521. Loxia curverostra minor.

AM. CROSSBILL.

Winter resident at Coralville.

522. Loxia leucoptera.

WHITE-WINGED CROSSBILL.

528. Acanthis linaria.

COMMON REDPOLL.

529. Spinus tristis.

AM. GOLDFINCH.

E. S. Passer domesticus.

ENGLISH SPARROW.

534. Plectrophenax nivalis.

SNOWFLAKE.

Winter resident; common.

536. Calcarius lapponicus.

LAPLAND LONGSPUR.

537. Calcarius pictus.

SMITH'S LONGSPUR.

Winter visitor; uncommon.

540. Poocaetes gramineus.

VESPER SPARROW, GRASS FINCH.

"A common breeder."

542a. Ammodramus sandwichensis savanna.

SAVANNA SPARROW

545. Ammodramus bairdii,

BAIRD'S BUNTING.

546. Ammodramus savanarum passerinus.

GRASSHOPPER SPARROW.

Breeds.

547. Ammodramus Henslowii.

HENSLOW'S SPARROW.

"Found breeding at Grinnell by Lynds Jones."

548. Ammodramus leconteii.

LE CONTE'S SPARROW.

Found at Storm Lake in "first plumage."

552. Chondestes grammacus.

LARK FINCH.

Common breeder.

553. Zonotrichia querula.

HARRIS'S SPARROW.

"Common in middle and western Iowa and straggler at Mitchell" during both migrations.

554. Zonotrichia leucophrys.

WHITE CROWNED SPARROW.

"Winters in the Gulf states and southward."

558. Zonotrichia albicollis.

WHITE-THROATED SPARROW.

Rather common migrant.

559. Spizella monticola.

TREE SPARROW.

"One of the most abundant winter birds from latitude 43 degrees to latitude 24 degrees N.".

560. Spizella socialis.

CHIPPING SPARROW.

561. Spizella pallida.

CLAY-COLORED SPARROW.

Breeds from northern Neb., central Iowa and northern Ill.; northward.

563. Spizella pusilla.

FIELD SPARROW.

Breeds over all Iowa.

567. Junco hyemalis.

SLATE-COLORED SNOWBIRD.

Winter resident. "Ordinary northern winter limit of the species is from lat. 42 degrees to lat. 43 degrees.

581. Melospiza fasciata.

SONG SPARROW.

Breeder and common migrant.

583. Melospiza lincolni.

LINCOLN'S SPARROW.

Common in migrations.

584. Melospiza georgiana.

SWAMP SPARROW.

585. Passerella iliaca.

FOX SPARROW.

"Few birds migrate more rapidly than the Fox Sparrow, and it is not uncommon for the first, the bulk and the last to be noted during the same week."

587. Pipilo erythrophthalmus.

TOWHEE.

593. Cardinalis cardinalis.

CARDINAL.

Occurs in southern Iowa.

595. Hobia ludoviciana.

ROSE-BREASTED GROSBEAK.

Rather common in migrations.

598. Passerina cyanea.

INDIGO BUNTING.

Summer resident.

604. Spiza americana.

DICKCISSEL, BLACK-THROATED BUNTING.

Breeds commonly.

A. O. U. ***Mniotiltidae.***

636. Mniotilta varia.

BLACK AND WHITE CREEPER.

Leaves Iowa about Sept. 5th and returns in spring April 20 to May 1st.

637. Protonotaria citrea.

PROTHONOTARY WARBLER.

"Winters beyond our southern border, and advances in spring regularly to southern Ind., Ill., Ia , and Neb. and occasionaly a little farther, breeding throughout its U. S. range.

641. Helminthophila pinus.

BLUE-WINGED YELLOW WARBLER.

Summer resident as far north as southern Minn.

642. Helminthophila chrysoptera.

GOLDENWINGED WARBLER.

"Breeds in Minn. Wis. and Mich."

646. Helminthophila ruficapilla.

NASHVILLE WARBLER.

"Breeds from northern Neb. and Ill., northward."

647. Helminthophila celata.

ORANGE-CROWNED WARBLER.

Common in migration.

647. Helminthophila peregrina.

TENNESSEE WARBLER.

Common migrant, arriving about May 5th.

648. Compsothlypis americana.

PARULA WARBLER.

Not reported from Iowa stations but the species occur as a migrant and may breed in the state.

650. Dendroica tigrina.

CAPE MAY WARBLER.

Migrant, not common,

652. Dendroica aestiva.

YELLOW WARBLER.

Breeds abundantly throughout Iowa.

54. Dendroica caerulescens,

BLACK-THROATED BLUE WARBLER.

Migrant, not uncommon.

655. Dendroica coronata.

YELLOW-RUMPED WARBLER.

Abundant; migrant.

657. Dendroica maculosa.

BLACK AND YELLOW OR MAGNOLIA WARBLER.

Rapid migrant, arriving about May 5th.

658. Dendroica caerulia.

CERULIAN WARBLER.

Migrant. "Though not uncommon in the Miss. Valley, its habit of keeping in the tops of the tallest trees, enables it to pass unnoticed."

659. Dendroica pennsylvanica.

CHESTNUT-SIDED WARBLER.

"Breeds throughout Manitoba and the northern states, south to Ia , and Ill."

660. Dendroica castanea.

BAY-BREASTED WARBLER.

Not reported from any Iowa station, but was quoted from St. Louis, Mo., and from Lanesboro, Minn. "By no means a common species in Minn. (Hatch.)

661. Dendroica striata.

BLACK-POLL WARBLER.

Common migrant. "Breeds north of U. S."

662. Dendroica black burniae.

BLACK BURNIAN WARBLER.

Breeds from northern Minn. northward

667. Dendroica virens.

BLACK-THROATED GREEN WARBLER.

Migrant, not common. May breed in northeastern Iowa.

671. Dendroica vigorsii.

PINE-CREEPING WARBLER.

Not reported from any Iowa station but was reported from St. Louis, Mo., and from Lanesboro and Heron Lake, Minn. n opposite sides of the state. "Invariably associated with Dendroica palmarum" [Hatch.]

672. Dendroica palmarum.

RED-POLL OR PALM WARBLER.

Common migrant. Arrived here about April 27, leaves about Sept 28.

674. Leiurus aurocapillus.

OVEN BIRD.

Common migrant; breeds.

675. Leiurus nova boracensis.

WATER THRUSH.

Not reported west of Miss. river. "Rather common resident in most wooded portions of the state." [Hatch, Birds of Minn.] "Near Des Moines, Ia., a female was seen feeding its young in June 1884, according to Keyes and Williamss" [Davie's Nests and Eggs of N. A. Birds.]

675a. Leiurus nova boracensis notabilis.

GRINNELL'S WATER-THRUSH

"Not an uncommon migrant." Probably breeds.

676. Leiurus motacilla.

LOUISIANA WATER-THRUSH.

Rare north of latitude 42 deg. Breeds.

677. Geothlypis formosa.

KENTUCKY WARBLER.

"May 11 it had reached almost the limit of its northward advance at Burlington, Iowa."

678. Geothlypis agilis.

CONNECTICUT WARBLER.

"One of the rarest warblers of Miss. Valley." Not reported from Iowa, but was reported from St. Louis, Mo., and from Minn.

679. Geothlypis philadelphia.

MOURNING WARBLER.

Rare and rapid migrant. May breed.

681. Geothlypis trichas.

MARYLAND YELLOW THROAT.

Not reported west of Miss. river. "Reported from nearly every part of the state." (Hatch, Birds of Minnesota.]

681a Geothlypis trichas occidentalis.

WESTERN MARYLAND YELLOW THROAT.

All the records relating to Maryland Yellow Throats have been brought under the present sub-species."

683. Icteria virens.

YELLOW-BREASTED CHAT.

Rather common summer resident.

684. Sylvania mitrate.

HOODED WARBLER.

"A southern bird. Has been taken in Wis. Iowa, eastern Kansas, etc."

685. Sylvania pusilla.

WILSON'S OR BLACK-CAPPED YELLOW WARBLER.

"Common migrant. Breeding in Minn.'

986. Sylvania canadenis.

CANADIAN WARBLER.

Reported from St. Louis, Mo, and Lanesboro Minn., but not from Iowa stations

687. Letophaga ruticilla.

AM. REDSTART.

Common migrant and summer resident.

In all cases where a species is recorded in this list, that was not reported by Iowa stations in the Bulletin, I have made disfinct mention of this fact, and such species have been here recorded because of their occurrence both north and south of Iowa or where there was some difference of opinion in regard to the species as in the case of Leiurus nova boracensis and Geothlypis trichas.

CARLETON R. BALL,

Ames, Ia. Sept. 25, '94.

Important!

Members who are in arrears for dues will please consider this equivalent to an official notification of such arrearage. An early remittance will oblige. Please send *Money Order.*

Yours truly,

W. W. LOOMIS, Treas.

Clermont, Iowa.

Nesting of the Brown Creeper.

By Curtis H. Wilson.

May 30, 1891, I visited some islands in the Mississippi River a couple of miles below Davenport, Iowa. On one of these were a number of dead willow stubs. While sitting in the boat waiting for a friend, I saw a pair of Brown Creeepers [certhia familiaria americanas] alight on a large stub about twenty feet above the ground and disappear under a large strip of loose bark. On climbing the tree I found between the bark and tree trunk a nest composed of wool and other soft substances and containing three young birds a day or so old. This is the first instance ever reported as far as I am able to ascertain, of these birds nesting in Iowa or Illinois.—*Ologist.*

75 Cents

Only for such birds as Scarlet Tanager, Rose-breasted Grosbeak. Baltimore Oriole, Chewink, Meadow Lark, Blackbird, Brown Trasher, Blue Jay, and birds of same size. All collected this year, and first-class.

Also sets and singles of the Black-crowned Night-Heron for sale at 10c. each.

Live foxes for sale. These are fine specimens of the Red Fox. taken this Spring in Western Minn. Bird skins, Buffalo Horns, Deer Horns, and curiosities.

Send stamp for price list.

W. W. SEARLES,

Taxidermist and Collector of Birds and Minerals.

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Address all communications to
DAVID L. SAVAGE,
Salem, Iowa.

The Iowa Ornithologist.

It is with pleasure that we present to you the initial number of this Magazine. It is published as the Organ of the Iowa Ornithological Association. This is the only Magazine, devoted to Ornithology and Oology in the Mississippi Valley, hence it undoubtedly will be welcomed by collectors and ornithologists everywhere.

We believe that the first number of THE IOWA ORNITHOLOGIST speaks for itself. As to the future, we are not without enthusiasm, and shall endeavor to keep up to a standard which will alway make us reliable, and valuable.

We will have an *exchange column* in the next issue, free for all members of the I. O. A., so send in your exchange notice in good time.

THE OPENING ADDRESS.

By request of President Irons, I have accepted the editorship of THE IOWA ORNITHOLOGIST, but not without feeling that there are many in the Association that could do the work much better than I, because they have had more experience. Yet with the love of nature implanted in my heart, I am willing to accept the editorship of a Magazine devoted especially to Ornithology, my favorite study, for I feel that the happiest moments of my life are when I am in the woods studying my "friends in plumes;"

Far from the world's dull care
With Peace and Nature there,
Stray I, a boy!
Birds come and sing to me,
Ah! they do bring to me—
Fullness of joy.

Truly, Byron felt the delights of delving among the secret wonders, with which Nature's storehouses are filled, yes to overflowing; when he said:

"There is a pleasure in the pathless woods,
There is a rapture on the lonely shore,
There is society where none intrudes
By the deep sea, and music in its roar.
I love not man the less, but nature more,
From these our interviews in which I steal
From what I may be, or have been before,
To mingle with the universe, and feel
Which I can ne'er express, yet cannot all conceal."

Now, this Magazine is published by the members, for the members of the I. O. A., hence each member should be personally interested in its welfare. We will endeavor to have this Magazine, just what a majority of the active members of the I. O. A. desire

it to be; as soon as each member receives a copy of this issue, I desire that they write at once, telling what they think of it, what changes they think had better be made, and keeping back not one of their ideas on the subject. I will forward these letters to the Executive Council, and each one will be carefully considered.

It is my desire (and I will do all in my power), that THE IOWA ORNITHOLOGIST may be a Magazine that will promote a true knowledge of the Wonders of Nature, and awaken in the hearts and minds of all its readers a truer love and deeper interest in the study of Nature, enabling them to "Look through Natures up to Nature's God."

DAVID L. SAVAGE.

THE ORNITHOLOGICAL ASSOCIATION.

Observing ornithologists cannot have failed to have noticed the lack of organization among the fraternity throughout the Mississippi Valley, while in the East flourishing ornithological societies are numerous. It is not because of lack of material, for we have earnest and intelligent collectors in Iowa, while the species that breed and are migrants form a wide field of research. It is therefore, apparent that something is necessary to revive interest, and we hope that the Iowa Ornithological Association will answer the purpose. This Association was organized June 15th, 1894. It is our desire to have all the honest and active ornithologists in the State as active members; the annual dues are only fifty cents, and members that are not in arrears for dues will receive THE IOWA ORNITHOLOGIST free. The work of the Association is done entirely through correspondence.

For the next quarter we have taken up the special study of the following families; "Icteridæ" (black birds, orioles, etc.,) "Tyrannidæ" (fly-catchers), and "Alandidæ" (larks); a full report of what is desired is given on another page.

The following resolutions have been adopted by the Executive Council:

Resolved, That we no longer use the *Naturalist* as the official organ, but, that the notes of the active members be published in the form of a magazine, which shall be issued quarterly.

Resolved, That we place the names, R. D. Goss, ...New Sharon, William Savage,.....Wilsonville, on the "roll of honor," the former on the recommendation of W. A. Bryan, the latter on recommendation of David L. Savage; and that we admit the applicant, Paul P. McGinty, of Athens, Ga. to associate membership.

Resolved, That the annual dues of the associate members be changed from twenty-five cents to forty cents; and that forty cents be the price of one years subscription to the magazine.

Signed,
ERNEST IRONS, President.
CARLETON R, BALL,
W. A. BRYAN,
E. B. WEBSTER,
Executive Council.

Below will be found a list of all members in good standing at this date:

Ernest Irons, President.
Carleton R. Ball, Vice President.
David L. Savage, Secretary.
W. W. Loomis, Treasurer.

ACTIVE MEMBERS.

1 Anderson, Rudolph M. Forest City.
2 Ball, Carleton R., Ames.
3 Barstch, Paul, Burlington.
4 Bryan, Wm. A., New Sharon.
5 Crone, Jno. V., Marathon.
6 Giddings, H. *J.*, Sabula.
6 Godley, A. P., Le Grand.
8 Irons. Ernest, Council Bluffs.
9 Keyes, Chas. R., Mt. Vernon,
10 Law, J. Eugene, Perry.
11 Loomis, W. W., Clermont.
12 Newell, Wilman, Ames.
13 Richardson, F. G., Mason City.
14 Savage, Walter G., Hillsboro.
15 Savage, David L., Salem.
16 Searles, W. W., Lime Springs.
17 Stearns, Fred R., Sac City.
18 Tryon, Chas. C., Avoca.
19 Webster, E. B., Cresco.
20 Woods, Paul C., Fayette.

HONORARY.

1 Goss, R. D., New Sharon.
2 Savage, Wm., Wilsonville.

ASSOCIATE.

1 Baylis, A. W., Cedar Rapids.
2 Maycock, W. H., Salem, Iowa.
3 McGinty, Paul P., Athens, Ga.
4 McLaughlin, H. M, Mason City, Iowa.

Any further information concerning the Association will be gladly furnished by the secretary. Applications for membership should be to the secretary. We need the cooperation of every active ornithologist in the state, and herewith give you a cordial invitation to join our ranks.

Yours very truly,

DAVID L. SAVAGE.

Salem, Ia.

Our Special Work.

It has been decided that we take up the families *Icteridae* (black-birds, orioles, etc] *Tyrannidae*, [fly-catchers], and *Alandidae*, [larks] for this quarter.

The active members are requested to send all the notes they have on all the species of the Family *Icteridae*, [black-birds, orioles] to W. W. Searles, Lime Springs. Iowa, by November 15. In making out your notes please state whether the species are permanent resident, winter resident, transient visitant, summer resident, or accidental visitant, and whether abundant, common, tolerably common or rare, and also report on as many of the following questions as possible:

Habitat.—Are they found in forests, marshes, dry uplands, on borders of ponds and lakes, running streams or near dwellings?

Habits.—Explain all their peculiar habits you have observed.

Song.—Favorite time of day or night; influence of weather on its song; difference between song of male and female.

Nesting.—Give full particulars of construction, position, height from ground, exact date, incubation of eggs, identification and composition of nests. Describing exact size and color of eggs and all peculiar situations of nests. Number of broods reared by one pair in a season. Are any of these species imposed upon by the Cowbird?

Send your notes on the Family *Tyrannidae* to J. Eugene Law, Perry, Iowa, by Dec 1st.

Your notes on the Family *Alandidae* should be sent to Jno. V. Crone,

Marathon, Iowa. In writing your notes on the last two families named, please follow the directions as given above.

Go to work at once preparing your notes and have them ready to send in promptly on the dates named, as we want to get the next issue out early, for it will be the New Year [January] number.

GENERAL NOTES OF INTEREST.

THE TUFTED TITMOUSE IN IOWA.—On the 20th of September, 1994, I saw two specimens of (Parus bicolor) with a company of Black-capped Chickadees (Parus atricapillus) in Van Buren county, Iowa.—W. G. Savage, Hillsboro, Iowa.

CHANGE OF HABITS IN OUR NATIVE BIRDS.—"It would be as interesting from an evolutionary point of view, to note any change in the habits of an animal, any change in the way it adjusted itself to its environments, as to note the change in its bodily form or structure. It seems to me that such a change is taking place with the English Sparrow. A dozen or more years' ago when these aliens first became a feature in our fauna it seemed probable that our native birds would be entirely driven from the neibhborhood of our cities and villages. Our Robins, Bluebirds, Catbirds, Grosbeaks, Sparrows, Martins and the like were mobbed, driven from their food and nests and generally taught to believe, with Charles Summer, that "life is a serious business." In this section, at any rate, a change has gradually taken place. Either our native birds have unexpectedly developed powers of resistance at first unsuspected or the pugnacity of the English Sparrows has diminished, for certainly our own songsters have not been driven away, but on the contrary, seem as numerous as they were twenty years ago. For the past two or three years, since my attention has been called to the matter, I have seen little if any persecution of our native birds by the foreign sparrows; on the contrary, our own birds are now often the aggressors, and if they do not indulge in persecution themselves, are adepts at defense. Very commonly a Jay, Robin, or Catbird will from pure mischief hustle a flock of Sparrows into a desperate flight. In and about Rockford, Illinois, a place of 30,000 inhabitants, the native birds have not been so numerous in twenty years as in the two or three just passed. The conditions of the adjustment between the Sparrows and our common birds have changed to some extent, it seems. As has been noted before, the abundance of the sparrows may serve to explain the increase in the number of the smaller birds of prey,—with us notably the Screech Owl."—F. H. Kimcoll, Rockford, Illinois.—"The Auk."

A SET OF FIVE OF THE PRAIRIE HORNED LARK.—On April 12th, 1892, a friend and myself started on a search for eggs of this species. Our first find was a very exceptional set of five normally colored eggs, which on blowing proved slightly incubated. This is the first set of over four I ever found, and find three more common.

than four in this locality. We were afterwards rewarded with two sets of of these eggs each.—J. H. Brown, Davenport, Iowa.—"Oologist."

THE PILEATED WOODPECKER IN SOUTHERN IOWA.—While in the heavy timber near Big Cedar Creek, in Henry county, on September 15th, 1894, I noted three specimens of (Ceophlocus pileatus.) This bird is quite rare in this locality.—[ED.]

THE CEDAR WAXWING IN NORTHERN IOWA.—In the spring and fall migrations (Ampelis cedrorum) is very plentiful. A few, however, breed here as I have taken three nests, and knew of another being taken. A pair built two nests and raised two broods, one year, in our yard in the center of Forest City, Iowa, the first nest was within one rod of the house. I would class them as a resident in Winnebago county, generally seen in flocks of from five to fifty. They feed on all kinds of berries, and also seem to be good fly catchers.—J. Eugene Law.

THE SAW-WHET OWL IN CAPTIVITY.—On March 18th, 1893, some boys presented me with a live specimen of (Nyctala acadica), which they had caught two days previous. I kept it alive until November 25th, 1893, when it died. From the time when I first got it, it was always very tame and would take birds and mice from my hands, and eat them. Frequently during the night I would hear its querulous whistle or hoot repeated again and again.—R. M. Anderson, Forest City, Iowa.

We desire to exchange advertising space with other publishers.

TO IOWA BIRD-LOVERS.

THE IOWA ORNITHOLOGIST is a thirty-two page magazine, which contains timely and interesting articles on Ornithology.

It is the organ of the Iowa Ornithological Association, an organization for the purpose of promoting a more thorough study of the birds of our State. Are you a member? If not you should be. for we need the co-operation of every active ornithologist in the State; dues only fifty cents annually, and members receive THE IOWA ORNITHOLOGIST free.

We extend to you a cordial invitation to join our ranks: send ten cents for a sample copy of THE IOWA ORNITHOLOGIST.

Yours very truly,

DAVID L. SAVAGE.

We would also call the attention of *advertisers* to our "advertising rates," which are exceedingly low. Give us a trial.

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CONTENTS.

Page.

Notes on the birds of Iowa (*Tingilladae, Mniotiltidae*) 1

General Notes of Interest—The Tufted Titmouse in Iowa; Change of Habits in our Native Birds; A Set of five of the Prairie Horned Lark; The Pileated Woodpecker in Southern Iowa; The Cedar Waxwing in Northern Iowa; The Saw-whet Owl in Captivity..... 25

The Opening Address 22

The Iowa Ornithological Association 23

Nesting of the Brown Creeper..... 21

Our Special Work..... 24

To Iowa Bird-Lovers 26

THE MUSEUM.

A Monthly Magazine for both Amateur and Specialist, Devoted Exclusively to Research in Natural Science.

The above publication I shall issue regularly after November 15th at latest, and first number may possibly appear sooner.

It is to be a high-class journal, 34 wide double column pages, and will contain interesting articles illustrated with fine engravings, on Oology, Ornithology, Mammalia, Mollusca, Minerology, etc. No fiction, or over drawn articles will be allowed, but all matter will be strictly original, from the pens of the best naturalists of the present day.

For the first year an exchange column will be open for the use of subscribers, at one-half the usual rates. I have used the columns of various scientific magazines enough to know that to be valuable, the paper must have a large circulation. I cannot boast a large subscription list at present, of course, but I can guarantee to every person who may send his advertisment for the initial number, that his ad. for the first three numbers at least, will go to 5,000 first-class addresses. These 5,000 names will be carefully screened from over 20,000 names now on hand. Over half of these parties have either written or ordered of me the past year. Can you think of a magazine that offers such opportunities for A 1 results.

Rates on application.

The subscription price will be $1.00 a year. In order to start the magazine off with a good sized list of subscribers, I make the following offer:

To each and every person who sends me $1.00 for subscription to "The Museum" for a year, beginning November 15, and ensuing for one year therefrom, I agree to send a credit slip good for 50c worth of anything I advertise; or, or you may receive one year's subscription FREE, with an order to the amount of $2.00 worth of anything I advertise.

Doubtless no one is better posted than I of the perils of launching into the sea of "specialist" journalism, and I would not do so at this time, were I not urged on by my friends and patrons, they assuring me that at this time there is need of a journal such as I shall present to you. They have been one and all so enthusiastic in their support, that I feel sure of hearty approval all along the line.

Hoping to hear from you frequently and to merit your patronage, I am,

Yours fraternally,

WALTER F. WEBB,

Albion, N. Y.

"Go forth under the open sky
And lis't to Nature's teachings."

THE

IOWA ORNITHOLOGIST.

VOL. I. NO. 2.

JANUARY, 1895.

A QUARTERLY MAGAZINE
DEVOTED TO
ORNITHOLOGY AND OOLOGY.

40 Cents Per Year.

PUBLISHED FOR
THE IOWA ORNITHOLOGICAL ASSOCIATION.

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CONTENTS.

The American Woodcock	Page 28
Hooded Warbler	28
Notes on the Birds of Iowa — *Tyrannidae, Alaudidae, and Icteridae,*	29
Pied-billed Grebe	44
American Ornithologists' Union	45
The Pine-creeping Warbler	47
Iowa Ornithological Association	50
A Peculiar Nesting Site	51
General Notes of Interest	52

G. L. TOMLINSON, Printer

THE Iowa Ornithologist

ORNITHOLOGY. OOLOGY

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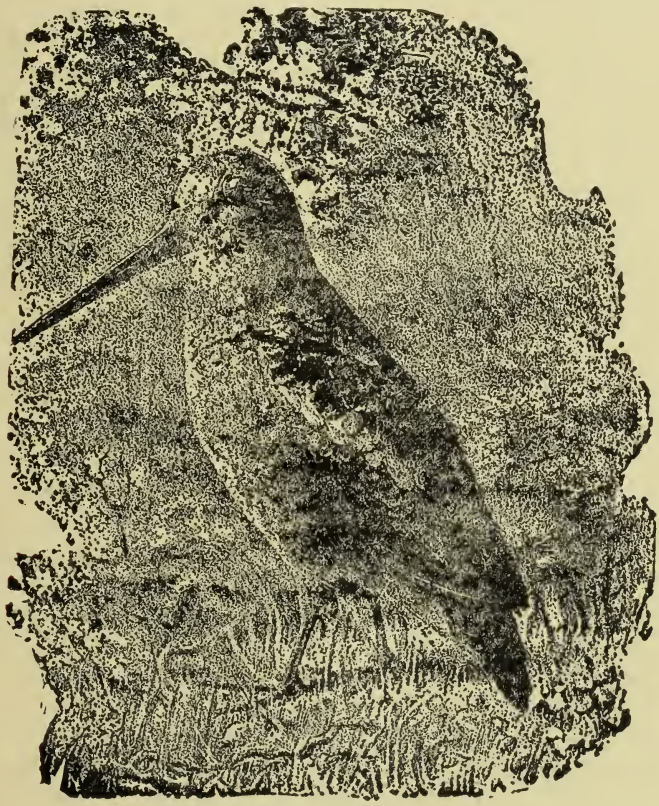

The American Woodcock.

THE AMERICAN WOODCOCK.

Philohela minor.

This species is one of our most interesting and beautiful game birds. Some eleven or twelve inches long – the male being quite a good deal less – with a bill three inches long, wing five and one-half inches, tarsus one and one fourth inches, middle toe and claw one and three-fourths inches; the toe very slender and soft; tail is only one and one-half inches long, composed of twelve feathers.

The eye is placed far back and very high in the head, giving the bird a rather droll appearance, but for all that, he is not as foolish a bird as he may be foolish looking. About sunset or rather between sunset and dark, in the months of April and May, he in his way is very musical, although his notes are not very charming to our ears, being composed of a few harshly uttered notes, which may with a very little imaginative help be rendered into the words, *cuckoo, speak;* the last word more guttural than the first. Sometimes when he is performing his evening exercises, it is quite difficult to obtain a shot at him as he is extremely shy and wary; the least movement of the arm, to level the gun upon him is discovered and away he goes flying in a wide circle and mounting higher and higher untill he seems quite exhausted, then he commences a series of notes resembling the words, *chick, chick, chow, chow;* and the nearer the commencement of his downward flight the faster he repeats his notes, the two last words are repeated in a much lower scale than the first, then you see him coming down like a plummet, but before he touches the earth, he spreads his wings, and fluttering a few feet above the ground he alights as graceful as a snowflake, and if nothing suspicious appears in his view, again begins his song. This bird although a lover of watery and marshy ground, always nests on high ground, and a peculiarity I have obser ed in them is, they carry their young when very small to the waters edge, and then after a time back to high ground.

WM. SAVAGE.

Hooded Warbler.

Sylvania mitrata.

In a recent letter from Mr. Paul Bartsch, he speaks of securing a specimen of this species, on May 25, 1892, near Burlington, Iowa. This bird is quite rare in this state, it was not included in the list of Warblers, which was published in the October IOWA ORNITHOLOGIST, No. 684. A. O. U.

Notes on The Birds of Iowa.

ORDER PASSERES.

Perching Birds.

Birds that have the four toes on nearly the same level, with the hind one exactly opposite the others, giving great facility in perching.

SUBORDER CLAMATORES.

Songless Perching Birds.

FAMILY TYRANNIDÆ.

Flycatchers.

Most of the species are strictly insectivorous, hence they are indispensable to the farmer.

444. Tyrannus tyrannus. (Linn)

TYRANT FLYCATCHER.

King Bird.

Common summer resident throughout the state. "Arrives latter part of April and departs last of August."(H. G. Giddings, Jackson Co.) "Nesting sites vary widely, nests being found in groves near dwellings, on farm machinery in yards and out in the flelds, in isolated trees on boundaries of farms, and in thickets by the side of the lonely river. Nests are composed of grass and small sticks or twigs with an occasional string woven in, and lined with hair, wool or feathers. In Lyons Co., fresh eggs may be found from June first until July, fifth."(C. R. Ball.) "I observed a curious nest of this bird's, composed almost entirely of sheep's wool. It contained 3 eggs."(P. C. Woods.) "I have a runt egg about the size of a Yellow Warbler's which I found with two full sized ones in a deserted Blue Jay's nest. Two peculiar nesting sites I remember were, one on top of a rotten post and one between the spokes of a rake wheel."(Jno. V. Crone.) "The spots on different sets exhibit two phases of coloration, some sets being spotted with clear bright brown and others with dark purplish brown. Have found a runt egg smaller than a Wren's."(R. M. Anderson.)

452. Myiarchus crinitus.(Linn,)

CRESTED FLYCATCHER.

"Tolerably common summer resident in Jackson Co., Nests in holes in trees. Very retiring in its habits, generally frequents deep woods. Present in '94 from May 15, to September 2."(H. G. Giddings.) "Common summer resident in Van Buren Co. although not abundant."(W. G. Savage.) "Arrives second week in May, departs second week in September. Its presence is always made known by its harsh cry. Nests in natural cavities or deserted woodpecker holes high up in trees. Nests of any trash, feathers or woolly substances and a cast off snake skin." (Lynds Jones.) Rare in northern part of the state. F. G. Richardson has taken specimens in Cerro Gordo Co. Common summer resident in Dallas Co., making the woods,

ring with its boisterous cries, especially for first week or two after its arrival.

456. Sayornis Phoebe. (Lath.)

PEWEE.

Common summer resident throughout the state. The first of the Flycatchers to arrive and the last to depart. "It is very plentiful in Fayette Co., nesting anywhere in May, June and July." (P. C. Woods.) "In 1893 one pair, I think, built four different nests, and eggs were taken from four different spots under the same bridge, as follows:

June 3d: Eggs unspotted, incubation advanced.

June 13, 4 fresh eggs, unspotted.

July 3d, 4 eggs slightly incubated.

July 22, 4 eggs unspotted."

(R. M. Anderson.)

"Was present in Jackson Co., in '94 from March 17, to October 9." (H. J. Giddings.) Nests in caves, under bridges and culverts, in cow sheds, deserted dwellings and out-buildings preferring the vicinity of streams. Nests generally placed on top of a horizontal beam though sometimes plastered to the side. Composed of mud, moss, and cow hair and lined with horse hair. Eggs 3 to 5, creamy white sometimes with brown specks.

459. Contopus Borealis. (Swains.)

OLIVE-SIDED FLYCATCHER.

It is not rare in Dallas Co. during the summer months. Rare in Winnebago and Cerro Gordo counties; one taken in the latter May 30, '91 and one in the former May 27, '93 are now in my collection. (J. E. L.) "Saw one specimen May 21, and another Aug. 30 1885 Rare migrant." (Lynds Jones.)

461, Contopus Virens. (Linn.)

WOOD PEWEE.

"Numerous near Council Bluffs. Nest found in partly cleared timber. Generally select oak or elm trees for nests, which are saddled on the limb." (E. Irons.) "Abundant summer resident in Jackson Co. found in forests and among scattering trees. Song heard at all times from arrival to departure. Present '94 from May 14, to Sept. 21." (H. J. Giddings.) "Summer resident common in woodland. Nests on horizontal limbs, usually oak or basswood, a very beautiful affair, quite shallow, covered with lichens and hard to discover, as it looks like a knot. Eggs 3 resembling King bird's in color. Laid about the 15 to 20 of June." (R. M. Anderson.) "Common summer resident in Fayette Co. A set of three was taken June 20." (P. C. Woods.)

463. Empidonax Flaviventris. (Baird.)

YELLOW BELLIED FLYCATCHER.

I took a specimen at Forest City, Winnebago Co. in Sept. 1890

but the exact date I do not remember. (J. E. L.) "Tolerably common from May 15 to June 1. I have not seen it in Autumn." (Lynds Jones.)

465. Empidonax acadicus. (Gmel.)

ACADIAN FLYCATCHER.

Probably more abundant than is generally known. "This species is not at all common near Council Bluffs. In the spring of '91 I found in company with a fellow collector, two sets, one of two, and one of three eggs. Altogether we took four nests with eggs that season. All were situated within a radius of one-half mile, in a tract of upland woods, sloping down to deep valleys. Nests were suspended in same manner as vireos, and generally overhung the side of a hill. There was however one exception. This nest contained 3 eggs. Nest in a tract of level hazel brush in a shady valley. Composed entirely of oak catkins with a few horse hairs in lining. Every season since I have spent days, searching every piece of woodland but failed to discover this flycatcher." (E. Irons.) "Common summer resident from May 10, to Sept. 15. Nests saddled into horizontal fork with bottom protruding below. Very few or no lichens used. Nests usually in low bushes in heavy thicket, or else heavy woods." (Lynds Jones.)

466a. Empidonax pusillus traillii. (Aud.)

TRAILL'S FLYCATCHER.

"Tolerably common summer resident in Lyon Co. One brood a season. Nesting begins June 10 lasting about three weeks." (C. R. Ball.) "Rather rare migrant in Jackson Co. May breed, but have never found nests. Retiring in habits and hard to observe." (H. J. Giddings.) "Summer resident in Winnebago Co. Tolerably common but a shy bird, seldom seen and very rarely surprised on nest. Have found nests as follows:

July 3, '93--One nest with young just hatched, and
One with 2 eggs and 2 young.
June 23, '94-- 4 eggs, incubation slight.
June 25, '94--4 eggs incubation slight.

All nests were in pussy willows at an average height of 4 feet. Eggs creamy white, speckled or wreathed with light reddish brown." (R. M. Anderson). "First met this bird in '89 when I took three nests from the same hedge and undoubtedly from the same birds. A fourth was found later with young. The hedge formed a hollow square. The birds are very shy. Following nests have been taken by me.

I. June 23, '89--1-3 Incubation fresh. Nest outside diameter 3½, inside 2. Outside depth 2¾, inside 1¾. Made of bark, down,

piece of string. Lined with fine grass. In fork of small willow 5ft up.
II. July 7. '89--1-3 Small embryos. Nest, outside depth 3¼ inside 1⅔. Material and height as in I.
III. July 21, '89 1-3 Data same as in II.
IV. June 29, '90-- 1-4 Incubation advanced. Nests as in above.
V. June 29 '90 --1-4 Fresh. Nest in willow 4ft up.
VI. June 21, '91 -- 1-4 Fresh." (Jno. V. Crone, Buena Vista Co.)

"Nests in willow copses near running stream. Two sets taken as follows:
I. June 18, '94-- 1-4 Fresh. Birds shy. Nests in willow crotch 6 ft up, and 10 ft from water. Composed of willow fibers, lined with down from willow.
II. July 14, '94-- 1-3 Fresh. Nest similar to first in willow crotch 8ft up."(E. Irons, Council Bluffs.)

467. Empidonax minimus. (Baird.)

LEAST FLYCATCHER.

"Breeds commonly in Buena Vista Co. Nests resembling Yellow Warbler's in position, date and material. Usually 4 eggs. Cowbirds impose on this species. Normally one brood in a season." (Jno. V. Crone.) "Common summer resident in Winnebago Co. Nests found in willow or cotton wood groves near houses, sometimes in woods, never higher than 15ft. 4 creamy white eggs are laid before the middle of June. Bird can frequently be caught on the nest." (R. M. Anderson.) "Rare summer resident in Lyon Co." (C. R. Ball.) "Common from May 1st to June 1st. No individuals ever remained all summer near Grinnell. I have no Autumn record."(Lynds Jones.)

SUBORDER OSCINES.

Song Birds.

FAMILY ALAUDIDÆ.

Larks.

Five of the members, from as many counties, have reported on this family in our state. From their notes it appears that it is represented by only one species viz:

474b Otocoris alpestris praticola.

PRAIRIE HORNED LARK.

Mr. Savage expressed his belief that *Otocoris alpestris* also occurs as a visitant although he has not observed it.

The Prairie Horned Lark is a permanent resident as far north as Lyon Co, and doubtless occurs as such in most if not all parts of the state. "It is least common in winter and most in migrating seasons."(J. Eugene Law).

The habitat of this species varies with the season. During the winter he frequents bare spots barnyards and roadsides, where food is most easily found. The notes on nesting will show its

habitat during breeding season.

The nests, while always upon the ground are placed in many different situations. Those for the first brood are usually placed on the southern slopes of hills and in door yards; those for the second and third broods are commonly found in cornfields, often at the foot of a stalk of corn."(C. R. Ball.) "Have found second nests placed in cornfields in a little hollow at the foot of a bunch of corn, lined with a few grasses; much less substantially built than the first nests of the season which are built with thick linings to withstand the cold and frequently heavy snow that falls on them." (R. M. Anderson. Winnebago, county.) "They frequently breed in corn and oat fields and hundreds of their nests are destroyed by the cultivator and drag,"(In Winnebago county. J. Eugene Law.) "In the spring they seek meadows and pasture lands for nests. Later as the weather becomes hotter I never find them there but they go to the cornfields and build their nests almost invariably beside a hill of growing corn. The nest is sunken down level with the soil and is very hard to see. This hole is lined (often very scantily) with soft grasses and often with some hair and milkweed down." (Marshall county. A. P. Godley.) "Breeds very early. Found a nest with three young birds nearly ready to fly Apr. 9, 1889, and Apr. 17, 1892, found nest with four birds that could fly. After the young are raised they mostly migrate, only a few remaining through the middle of summer; begin to return early in September, and remain till first part of November. This is the first bird to arrive in the Spring for the past five years; earliest date of arrival was Jan. 3 '93 and latest Feb. 14, 1892."(Jackson Co. H. J. Giddings.) "April 14, 1890, took a set 1-5, incubation advanced. Nest on top of a grassy hill in town. A hollow in the ground under a tussock of grass, lined with grass. Apr. 15, 1891, found two nests, one with three and one with four eggs. April 17, the latter contained three young and one egg. Dimensions of this nest were: Outside diameter 3½ in. Inside 2 in. Depth outside 2½. Inside 2. Composed of dry grass lined with tow and milkweed cotton. Situated in the middle of a dunghill surrounded by a bunch of dry grass. The nest containing 3 eggs was smaller with more hemp and cotton. Similar situation." (Winnebago Co., J. Eugene Law.) "The first set is usually in April though eggs have been taken near Forest City in March." (R. M. Anderson.) "Two or three broods are raised each year, the first eggs being laid as early as April 1st, while the finding of fresh eggs as late as July 15 is not uncommon. I

have in my cabinet a set of 6 eggs taken May 25, '91 from a nest in a pasture near town."(C. R. Ball). "Eggs 3 to 6"(J. Eugene Law.) The compiler has a set of six eggs taken May 26, 1891. Nests a hollow in ground in flax stubble field, lined with grass. Incubation slight. "Eggs generally 4 or 5" (Jackson Co., H. J. Giddings.) "I once found a nest of this species containing young that was placed within three feet of the wagon rut to a road. The travel on this road would rather exceed than fall under twenty teams a day. I often find one or more eggs of the cowbird in the nests of this species. On March 23, '94 I took a set of three eggs, incubation slight. After the above date we had several light snowstorms, one of which was about three inches in depth. After this I saw young birds which I know must have survived the storm."(Marshall Co. A. P. Godley.) "They are very fond of alighting on fenceposts to sing. Have never seen one in a tree. This species has the habit of arising to a considerable hight, singing as they arise then closing their wings to descend similar to the skylark; have never seen this performance except in spring; sings all the season and at all times, but more in early spring."(Jackson Co. H. J. Giddings.) "In Springtime the birds are frequently seen perched on a fencepost or a little rise of ground, uttering a low but rather pleasing song of a few notes. Once in early March I heard a Prairie Horned Lark sing while soaring up high in the air. In the Springtime when they are in pairs if one of the birds be shot the other bird will frequently fly down where the dead bird drops."(Winnebago Co. R. M. Anderson.) The small black tufts of feathers, from which the bird gets the name "horned" lark; are seldom elevated; only in time of excitement perhaps. The birds show little fear of men or animals, They bear in Buena Vista Co, the names of "snowbird", "ground bird", and "wheat bird," The last name is well deserved for they are very fond of wheat, and they and the Lapland Longspurs will materially diminish the stand if the seed is sown and left uncovered for any length of time. They are permanent residents, during mild winters at least, and rear three broods in a season.

Iowans all love this hardy and lonely representative of the Alaudidæ in the Hawkeye State.

Family ICTERIDÆ.

Black birds. Orioles. Etc.

494. Dolichonyx oryzivorus, (Linn.)

BOBOLINK.

This species is quite common throughout the state, in all favorite localities; arriving about the last of April or early in May.

"They frequent marshy places, especially meadows through which a little stream is running". (Paul Bartsch.) "During the nesting season they frequent grassy meadows, nesting in those places which are covered with grass, half-way between the short upland and the long slough grass."(Jno. V. Crone.) "It is a very good singer, invariably pouring forth its song as it rises on wing upon being flushed by the passer-by. During the breeding season the male can be seen perched upon some reed or fence-stake and from this elevated position he pours forth his song. The female is shy hence not often captured. I have seen these birds gather by thousands on the prairies of Illinois, opposite Burlington. Iowa, in the autumn,"(Paul Bartsch.(Mr. R. M. Anderson says that the male bird is a fine singer in the spring-time, as perched upon a bending weedstalk he whistles "bob-o-link-link-link." After the young are hatched, males. females, and young assume the same dull yellowish brown plumage, and during the latter part of July, and August, they frequent rushes, reeds and wild rice along the creeks, departing in September. The nests are very difficult to find. On July 2nd 1894, while coming across a pasture I flushed a male bobolink from the grass; a rod or two farther on the female flew up from near my feet, and looking down I saw the nest, which contained four fresh eggs; the nest was placed on the ground in the center of a clump of grass, and was composed entirely of grass; this was the first nest I ever found, however, I had the good luck to find two more during 1894. "The nest is placed in a slight depression in the ground, and is poorly constructed of a few blades of grass, with water often standing in the bottom. The eggs are four or five in number, and nearly the color of the surrounding grass."(Paul C. Woods.) "The nests are carefully concealed, and the female's habit of running through the grass untill some distance from the nest before-rising,

makes it a very diffiicult to find." (C. R. Ball.) "Common from first week in May untill second week in September. A pair to a very large meadow. I never could find a nest in Iowa, but have taken two in Ohio."(Lynds Jones.)

495. Molothrus ater. (Bodd.)

COWBIRD.

Common summer resident, throughout the state. "Arrives about the middle of March, and remains very late in Autmn. This species is always found in flocks. I have never found a single bird, but what some of its kin I were near by, unless it was a young one. It is very common at Burlington and Iowa City, often associating with other black birds."(Paul Bartsch.) Mr. Wm. Savage says that it is a bird that nature seems to have neglected in its education, as it does not build a nest, but imposes upon nearly all of our smaller birds, from the brown thrush to the smallest warbler. It lays its eggs in the nests of other birds, never driving away the rightful owner, nor taking possession by force, but will creep stealthly into the nest in the absence of the owner, and hastily deposits an egg, hurry back to join its company with the most obvious relief, and without the slightest further concern for their offspring. "I have found the eggs of this species in the nests of the following birds: Bluebird, Wood thrush, Yellow Warbler, Indigo Bunting, Song Sparrow, Chipping Sparrow, Rose-breasted Grosbeak, Scarlet Tanger, Redeyed Vireo, W. MarylandYellowthroat, Ovenbird, Cat bird, Brown Thrush."(J. Eugene Law.) Mr. R. M. Anderson writes of taking its eggs from nests of the Red winged blackbird, Least Flycatcher, Yellow throated Vireo, Orchard Oriole, and Dick cissel. "I have found their eggs in the nests of Prairie Horned Lark, Warbling Vireo, Bobolink and Barn Swallow." (Jno. V. Crone.) Other than the above, I have found the eggs of this parasite in nests of the Blue-gray Gnatcatcher, Blue-winged Warbler, Lark Sparrow, Field Sparrow, Towhee, Redstart Robin, Pewee and Kingbird. "The Ovenbird is the greatest sufferer from this parasite. I found an egg in the nest of a Pewee. The nest was under a low bridge." (Lynds Jones.) Mr. C. R. Ball thinks the Yellow Warbler is imposed upon the mos. The Cowbird cares little about the location of a nest in which it lays its eggs. I have found its eggs in nests in the trees, as often as on the ground, and peculiar place whice I found an egg was in a Pewee's nest which was placed in an old house, the only entrance to which was through a broken glass in the window. Strange how lady Cowbird found the nest.

This species usually lays its egg before the owner of the nest has laid hers, especially before the owner has completed laying. However the Yellow warbler if thus imposed upon before she has laid any of her own eggs, just adds another story to her nest thus burying the foriegn egg so deeply as fo suffer no inconvenience from it. Mr. W. A. Bryan writes that he has in his collection a nest of Triall's Flycatcher containing an egg of this species neatly covered up in the floor of the nest. Wilsol and Audubon, as well as the earlier Ornithologists in general, were mistaken in saying that no nest contained more than one of the Cowbird's eggs. I have found as many as five in the Towhee's nest, which also contained three of the owner's, and Wm. Savage found six in the nest of a Water Thrush with two of the Thrush's eggs. Mr. C. R. Ball writes that he finds two or three in the same nest more often than only one. It is peculiar to note that the eggs of this bird are subject to great variation in the size and markings, and that when found in the nests of such birds as the Towhee Brown Thrush and Prairie Horned Lark, it is often quite difficult to readily distinguish one from the other. I have found specimens that vary from .90x.78 to .75x.64, the largest egg was found in a Towhee's nest, the smallest in the nest of a Blue-gray Gnatcatcher. I find .86x.69 to be about the average size. This species is not very musical, yet the male during morning hours, when perched up on the topmost branch besides his mate or mates—for he is a polygamist and usually has two or three little ladies in faded black beside him—does his best to articulate the few musical notes which he possesses, but what a bungle he makes of it, for he seems literally to vomit them up. The Cowbird seems to have little fear of man or beast. "When a boy I used to herd cattle and have frequently seen them alight on the backs of the cattle. They were very tame for I killed several with my whip." (Jno. V. Crouse.)

497. Xanthocephalus xanthocephalus. (Bonap.)

YELLOW HEADED BLACKBIRD.

Common in favorite localities, more plentiful in the northern part of the state. "Quite rare near Burlington, Iowa. I know of only two specimens being taken near there, one of them adorns my collection now." (Paul Bartsch.) "Have never seen this specimen but twice in Mahaska Co., and then it was in company with the Red winged Blackbirds. Am informed by old settlers that formerly they were common here."(W. A. Bryan.) "It is noticeable that this species nests in certain

while in marshes, in the near vicinity you will not find a single bird. All the notes on this bird that I have, were taken in a large swamp, which is a mile long and three-fourths broad, and is situated on the outskirts of Perry, Iowa. The water is one to five feet deep over the whole marsh, and rushes are to be found everywhere. They grow five to six feet above the surface of the water. The birds go into the surrounding pastures and cornfields to feed. In no other place near here do I know of this species having been found, while in this one marsh there are probably thousands."(J, Eugene Law.) "Common in spring and fall in company with the Red-winged Blackbirds and a few are seen occasionally during the summer but I have never found them nesting in Lyon Co," (C. R. Ball.) "Abundant summer resident in Buena Vista Co., Found during the nesting season in the tall rushes and canebrakes of our sloughs. Have known them to build their nests in but two species of plants, one the cane brakes, the other round green rushes; both growing in the water. The nests are often bulky affairs, fastened from a few inches to several feet above the water; are composed mostly of grass, and partly of decaying vegetation. There is very little mud in their construction. The grass used for lining is flat, wide blades, finer than that used for the outside. Some of the nests would measure nearly a foot from top to bottom and perhaps four to six inches across. Others are made no larger than necessary. While the nests would vary greatly in outside measurements, they would present very little variation on the inside. The eggs are 3 to 5, possibly 6. They are of a pale blue ground color, and are thickly spotted with different shades of brown, thus differing radically from the other blackbird's eggs. They approach nearer the color of the Cowbird's eggs. Their song is not unplesant, and may be heard almost any day during the nesting season, but I cannot describe it. From my note book I see that I have taken eggs on the following dates: June 1, 1889. May 21, 1890. June 19, 1890. May 31, and June 7, 1891. From my data book I copy the following; June 12, '91 4 eggs, fresh. Nest composed of different kinds of grass. Situated in a bunch of round, green rushes, in a pond. This species is benefical to the farmer as they destroy many noxious insects which they obtain by following in the furrow behind the plow. Farmers in this locality especially the old settlers are prejudiced against all the blackbirds because in early days these birds often took the corn when it was just coming up. But of late years when food has been plenty they have not disturbed the corn to any extent."(Jno. V. Crone.)

498. Agelaius phoeniceus. (Linn.)

RED-WINGED BLACKBIRD.

"Arrived at Iowa City March 10, 1894. Common nesting in marshy places. Nests in colonies. Near Burlington they nest in shrubs, 8 or 10 feet above the ground, but near Iowa City, all the nests I found were near the ground, 1 to 3 feet above."(Paul Bartsch.) "Plentiful in Fayette Co. I have generally found the nest attached to three or four stalks of cat-tail, about 2 feet from the ground; almost invariably over water."(P. C. Woods.) "Summer resident, they are here from March to November. Nests in sloughs, where their ringing 'Kong–quer–ree' may be heard at all times of the day, during the nesting season. Two or three broods are raised in a season." (R. M. Anderson.) "Quite common, they nest in small bushes or in the big coarse grass, growing in swamps and ponds. Male and female not the same color."(Wm. Savage.) "Ten years ago, the nests were found commonly in the tall grass along the sloughs. and were destroyed in great numbers by the summer floods, but now the sloughs are all closely cropped pasture lands and the Red-wings have been forced to resort to willow trees along the larger streams for their nesting sites. In the early years of Lyon Co. when this species was more abundant than now, they were wont to congregate in immense flocks and often did serious damage to corn fields in the fall." (C. R. Ball.) "Very common from early March until the middle of November. Formerly nested exclusively in swampy 'cat-tail' grown sloughs, but now resort to coarse grass and even to small bushes." (Lynds Jones.) "Abundant breeder in every marsh. May 12, '94 found several nests with one egg.

May 29, Nests from just begun to containing young birds. 2-3 and 1-4 sets taken, latter with incubation advanced.

June 9, Took sets 7-3 and 2-4 all fresh except 1-3 and 1-4.

June 10, Noted numbers of full fledged young in a dried up marsh.

June 16, Found 3 nests with young and 4-3 sets incubation begun.

The nest is generally, when in a large marsh, near the edge in the low thin rushes. Composed of rushes but lined with fine grass. One specimen was taken Mar. 20, '91 which had each feather tipped with whitish. On the back the tips were quite buffy. Shoulder patches bright orange, trimmed with buff. This was in Winnebago Co." (J. Eugene Law.)

"Abundant summer resident in Buena Vista Co. They nest in large numbers in the coarse grass bordering ponds. Where small

trees grow in such localities, they nest in them. Have found them nesting in small willows along the banks of a river. The eggs are usually four in number. The nests are composed of a layer of grass, one of mud and the lining, which is almost invariably of fine round grass resembling horse hair. Before leaving in the fall they congregate in large flocks, and often attack fields of corn, doing some damage by eating the grain some distance from the small end of the ear, the kernels being then in the milk. This species is sometimes, though rarely, a winter resident."(Jno. V. Crone.

501. Sturnella magna.

MEADOW LARK.

One of our most common summer residents, in mild winters when there is plenty of food, they remain with us. "Frequents meadows and pastures. A curious habit of this bird is that, while it seems to seek the vicinity of man in its choice of nesting sites, it will invariably desert its eggs if they once be discovered by a human being, though it seems to pay no attention to the passing of cattle. Nests on the ground, and are built and roofed over dry grass, and lined with fine grass. Eggs usually five, sometimes six. Song may be heard from early morning untill after dusk." (C. R. Ball.) "In Van Buren Co. this species can almost be called a resident, for they are occassionaly seen in the winter, however it is a common summer resident. On May 12, 1894 found a nest which contained five fresh eggs. The nest was placed in an oat field, a bunch of old cornstalks, which formed an archway over the nest."(W. G. Savage.) "The nests are very difficult to find, In the museum at Ames there is an albino specimen of this species." (W. A. Bryan.) Two broods are sometimes raised in a season for I have taken fresh eggs May 5, and as late as July 10. On May 10, 1892 I found a nest of the Meadow Lark's which contained four of its eggs and one of the Bob White's. "Common summer resident in Buena Vista Co. Nests in the dry grass of meadows and in bunches of old hay. The nests are often roofed over. The eggs reach six in number. They arrive during March. They love to sing from high places and perched upon a fence post or housetop will pour forth a joyous strain at regular intervals. They are gregarious to some extent during the fall migrations, leaving this locality in October. Have seen this species in midwinter and it is possible that some belated individuals may reside with us."(Jno. V. Crone.)

501b. Sturnella magna neglecta (Aud.)

WESTERN MEADOW LARK.

"One was killed at Iowa City this year. This species is gradually moving eastward. Quite common in Fayette Co."(Paul Bartsch.) "Is fairly common summer resident in Lyon Co. and is found in same locations as *Sturnella magna*."(C. R. Ball.) Mr. H. J. Giddings writes of noting a specimen in the spring of 1892, in Jackson Co. This species is very rare, if found, in most parts of the state.

506. Icterus spurius. (Linn.)

ORCHARD ORIOLE.

A plentiful summer resident throughout the state. "Builds its beautiful nest, which is composed of green grass, nearer the ground than the nest of the Baltimore Oriole. The following are three sets I have taken;

June 29, 1891, 1-3, incubation advanced. Nest in Lombardy poplar.

June 25, 1892, 1-4, and one Cowbird's egg. Fresh. Nest in Lombardy poplar, 15 feet from ground, and composed of greenish grass and lined with cotton.

June 24, 1893. 1-5, Incubation advanced. Nest in willow 10 ft. from the ground."(R. M. Anderson.) Rather more plentiful in Van Buren Co., than the Baltimore Oriole. Nests, not exactly pendant, but placed in the forked twigs of a tree, and not quite as ingeniously made as the Baltimore's nest." (Wm. Savage.) "Usually nests in orchard trees; have found the nest in a spruce tree 30 feet from the ground. The male is a nice singer in the spring. The last one seen Aug. 29, 1894."(H. J. Giddings.) "The nest is placed from 5 to 30 ft from the ground, in some tree in the orchard or near the farm-house. The song of the male is very pleasing, it sings mostly in the morning. Only one brood in a season."(W. S. Savage.) "Common from first week in May untill the middle of September. Majority of nests are in orchards and box-elder trees. Nest hardly pendant."(Lynds Jones.) "Arrived at Iowa City May 10, 1894. Not as common near Iowa City as it is near Burlington. I have a nest collected near the latter place, which is constructed of a white fiber which had been sent from New Orleans wrapping some flowers, and had been discarded, it is quite a unique affair and speaks well for the architectual powers of the bird."(Paul Bartsch.) "Common summer resident in Buena Vista Co. Frequents groves and trees which border waters. In groves the nest is usually situated a fairly good distance from the ground. In trees bordering waters, notably those around Pickerel Lake the

nest is usually hung from a branch over water. The nest is pendant, and usually composed of fine green grass with a sparse lining of downy substances. The eggs are three to five. The Cowbird inposes on this species. I have never observed the males of this species near the nest, nor does he appear as most males do, when the nest is disturbed. Have observed at least two instances in which a tree contained a nest of the King bird and one of this species at the same time. In each case the nest of the Oriole was above that of the Kingbird. Following is data of set: June 21, 1891; number of eggs 4. Incubation begun. Nest composed of green grass, lined with down from the cottonwood seed. Hanging from a small limb over large one, in cottonwood 35 ft. up and 3 feet from main trunk." (Jno. V. Crone.)

507. Icterus galbula. (Linn.)

BALTIMORE ORIOLE.

A common summer resident in all favorite localities throughout the state. "Nests commonly in trees along streets and in door-yards; builds a very pretty nest, which is usually well concealed," (W. A. Bryan.) "Arrives early in May and departs in September. Song is very pleasing, sings the most in early morning, does not sing much in cloudy weather. Usually rears only one brood in a season."(W. G. Savage.) "Hangs its nests from the topmost branch of some large tree. I collected a set of five eggs from a nest in the top of a Lombardy poplar tree by Main st. Forest City, on June 3, 1893."(R. M. Anderson.) "Prefers to nest near the habitation of man. Nest pendant, and composed of flaxy fibers, which the bird weaves together so firmly, that it is difficult to pull it to pieces. Nest placed from 12 to 40 feet from the ground."(Wm. Savage.) "Arrived in Dallas Co. May 3, 1894. On May 19, the female was carrying materials for nest." (J. Eugene Law.) "Common from first week in May untill middle of September. Majority of nests are in shade elm trees in town, always pendant."(Lynds Jones. "One day this fall a small boy brought me a bright colored bird which he said his brother had shot as it was eating apples in the orchard. I identified it as the Baltimore Oriole. While I am really unacquainted with this species I dont think it occurs very commonly, nor breeds in the vicinity of my home.(Jno. V. Crone.)

509. Scolecophagus carolinus. (Mull.)

RUSTY GRACKLE.

"Common as a migrant in April and October. Found both singly and in flocks. Shot one April 28, 1891. Saw a large flock on April 3, 1894, all of them

singing very loudly. In the spring they are a glossy green color, but in the fall the plumage is mixed with rusty brown." (R. M. Anderson.) "This black bird appears here very early in the spring, sometimes seen in Van Buren Co, in the winter, only as a migrant." (W. G. Savage.) "Abundant in spring and fall in Jackson Co. They often migrate in large flocks. and sometimes they are in company with Redwings and Bronzed Grackle. They were present in 1894 from Sept. 24, until Nov. 10." (H. G. Giddings.) "They appear in spring and fall in large flocks, do not nest here."(Wm. Savage.) "Common from middle of March until middle of April, and from the 1st of October until late in November. Often in company with other black-birds." (Lynds Jones.) "Common in both migrations in BuenaVista Co."(Jno. V. Crone.)

511b. Quiscalus quiscula aeneus. (Ridg.)

BRONZED GRACKLE.

February to November; exceedingly abundant throughout the state. "Particularly fond of cedar trees for nesting sites."(W. A. Bryan.) "Nests in colonies about farm-houses. Sometimes more than one nest is found in the same tree."(R. M. Anderson) "The nests are often placed as high as possible from the ground and are very bulky affairs, composed of grass, rootlets, lined with hair, strings, feathers and wool. Sets of five eggs are most common, but I have taken sets of six."(C. R. Ball.) "Nests in young orchards. I have found as many as four of their nests in one small tree." (Wm. Savage.) "Very plentiful in Fayette Co. Nests in evergreens near dwellings." (P. C Woods.) "Very common from early March until late November. Breeds in colonies, in shade trees about farm-dwellings; Lombardy poplar preferred."(Lynds Jones.)"Found in open upland. Nests in evergreen trees, in dooryards. Comes late in March or early in April. Is a good protector of the poultry yard from depredations of Crows, Hawks, etc. When its young are ready to leave the nest, it becomes very quarrelsome. I have seen one strike a cat. Although a large colony nests near my house, they never injure garden or field. In 1857 I spent the fall months in Guthrie Co., then very new, the Bronzed Grackle was very numerous, many thousands in flocks and were very destructive to the corn crop. Hatches but one brood after which it is not much seen, while in September it is seen in large flocks until November when it departs for the South." (H. Heaton.)"Abundant summer resident in Buena Vista Co. They are gregarious, and nest in

the farm groves, maples and poplars being their favorite trees The nests are bulky and composed of hay, straw, mud, rags, paper and any other odds and ends usually found scattered around farm yards. Nests are placed in upright forks, usually at a considerable height. A notable exception to the usual nesting site was one placed in a bunch of rushes in a slough, after the manner of a Yellowhead and Redwing. I could account for this in no other way than that the bird became discouraged at having its nest destroyed in the grove and desired to try the experiment of a new site. The eggs number 4 to 6. These birds love to follow the newly plowed furrow and pick up the grubs; an open corncrib is a boon to them during the nesting season." (Jno. V. Crone.) "Arrived at Iowa City Mar. 10, '94. Some of them winter in Illinois swamps in company with the Rusty G. This bird is quite abundant and large colonies nest in the firs of both cities Burlington and Iowa City. I have found as many as five nests in one tree. They are a noisy bird. This species as many others seems to decrease in numbers. I remember not more than 7 or 8 years ago flocks of these birds could be seen flying from Burlington to Illinois in late fall, for whole afternoons continuous flocks of 25 to 50 feet in width. These are things of the past for now only small flocks pursue that journey. No continuous bands cleaving the air."(Paul Bartsch.)

The Pied-billed Grebe.

This species is the first on the list of water birds with which I have had much experience. It nests abundantly in the ponds and sloughs of this locality. The nests are situated where the grass gives way to open water. They are a floating mass of decaying vegetation the shape of an inverted wash basin above water. The part below being a continuation of the part above. The nest is hollowed on top and in this hollow are deposited the 5 to 8 chalky eggs; pale blue at first but soon stained to a brown, dirty color. The eggs are almost invariably found covered and incubation most likely proceeds without the aid of the parent bird. The eggs begin to incubate as soon as laid for there are 8 stages in a set of 8 eggs. The readers are doubtless well acquainted with the general habits of this species. I have yet to note when and how it performs the migration. Whether at night or in the daytime, on wing or on foot or both. I have collected many eggs of this species and they may be found between the

latter part of May and first of July. During one year when we had very heavy rains I found eggs quite late in July. I copy one data which may be considered a typical one.

No 6. Pied billed Grebe. May 23, 1891. Palo Alto Co. Ia.. 6 eggs. A-6 Fresh. Identity sure. Nest composed of mud and decaying vegatation. floating in edge of a large slough.

JNO. V. CRONE.

The American Ornithologist's Union.

THE TWELFTH CONGRESS of the American Ornithologist's Union was held in New York City, November 12–15, 1894. The business meeting took place on the evening of November 12 in the 'Board Room' of the American Museum of Natural History. The three days' open session, to which the public was invited, was held in the Library of the Museum. As a number of the readers of the IOWA ORNITHOLOGIST are not members of the A. O. U. and therefore have not received a report of the proceedings of that meeting I give below a portion of the secretary's report which was published in the January *Auk*.

Business Session: The meeting was called to order by the President, Dr. Elliott Coues. Fifteen Active Members were present. The Secretary's report gave the membership of the Union at the opening of the congress as 616, constituted as follows: Active, 48: Honorary, 22; Corresponding, 71; Associate 475; —-the total increase for the year being 34. The officers elected were Dr. Elliott Coues, President; Wm. Brewster and Dr. C. Hart Merriam. Vice-Presidents; John H. Sage, Secrerary; William Dutcher, Treasurer.

Public Session: *First Day*. The meeting was called to order by the President Dr. Elliott Coues. An address of welcome was made by Mr. Morris K. Jesup Pres. of the Board of Trustees of the Museum. After appropriate response by the Chair, the meeting at once proceeded to the consideration of scientific papers.

Mr. Frank M. Chapman gave as the first paper of the morning, "Notes on the Habits of some of Our Tropical Birds."

The second paper was by Mrs. Abby F. C. Bates, entitled "A Swallow Roost at Waterville, Me." In the absence of the author it was read by Dr. J. A. Allen.

The third paper by Otto Widmann on 'Baird's Sparrow'.

The fourth title was 'The Summer Range of Colorado birds' by Prof. W. W. Cooke. In the absence of the author it was read by Dr. Jonathan Dwight, Jr.

The fifth paper was "Notes on

the California Vulture (*Pseudogryphus californianus*); by F. Stephens. This was read by the Secretary in the absence of the author. The opening paper of the afternoon session was "Remarks on the Avi-fauna of the Source of the Mississippi River', by Dr. Elliott Coues. Next followed a paper on '*Helinaia swainsonii* in Missouri,' by Otto Widmann.

The third paper was by Wm. W. Price, on 'The Nest and Eggs of the Olive Warbler. (*Dendroica olivacea*). In the absence of the author it was read by Frank M. Chapman.

'Robin's Winter Roost', by Otto Widmann, was the fourth paper.

Mr. William Dutcher exhibited a Labrador Duck, believed to be the last specimen killed and possibly the best one extant.

Second Day: The meeting was called to order by President, Dr. Coues.

The first paper of the morning was by Mr. F. A. Lucas 'On the Tongues of Birds.'

The second paper 'The Ornithology of Sable Island, Nova Scotia,' was by Dr Jonathan Dwight Jr.

The third title was 'A Contribution to the Life History of *Prozana cinereiceps* Lawr., with Critical Notes on some of its Allies' by Charles W. Richmond. In the absence of the author it was read by Dr. Allen.

The only paper of the afternoon session was by Mr. Frank M. Chapman, entitled 'A Sketch of the Bird-life of the Lesser Antilles.'

The members and visitors repaired to the Lecture Room of the Museum where lantern slides illustrating this paper were shown. Afterwards Mr. Wm. Dutcher exhibited lantern slides of common birds found in the vicinity of New York. Lantern slides of a few British birds, shown by Prof. A. S. Bickmore, concluded the afternoon.

Third Day. The meeting was called to order by President Dr. Coues. Before proceeding to the reading of papers, resolutions were adopted extending the thanks of the Union to the Trustees of the American Museum of Natural History for a place of meeting and for other courtesies tendered to the Union; to the Council of the Scientific Alliance of New York, for its cordial invitation to attend the meetings of the Societies forming the Alliance and to the Linnean Society of New York for generous hospitalities extended to the Union during its Twelfth Congress.

The first paper of the morning was by Mr. Otto Widmann on 'Smith's Longspur'. The second paper was by Geo. H. Mackay on 'The Terns of Muskeget Island'. In the absence of the author it

was read by Mr. Wm. Dutcher.

The third title was 'Something New' by Judge John Clark.

'The Nesting of Krider's Hawk in Minnesota,' by P. B. Peabody, was given in substance by Dr. Allen, in the absence of the author.

'*Certhia* in Missouri' by Otto Widmann, was read by title.

The afternoon was devoted to a paper by Mr. D. G. Elliot on 'Domestic Pigeons and Fowls, their Origin and Races, with reference to the Theory of Natural Selection'. It was illustrated with lantern slides.

At the conclusion of this paper the Union adjourned to meet in Washington, D. C., November 11, 1895."

The statistics of the Union show that there are twelve members from Iowa, one active, eleven associate. Their names are:

ACTIVE.

HON. CHARLES ALDRICH. Boone.

ASSOCIATE.

CARLETON R. BALL, Little Rock.
HARRY L. BOND, Sioux City.
EDMONDE S. CURRIER, Keokuk.
JNO. V. CRONE. Marathon.
CARL FRITZ HENNING, Boone.
ALBERT I. JOHNSON, Des Moines.
WM. E. PRAEGER, Keokuk.
MRS. M. RANN, Manchester.
D. H. TALBOT. Sioux City.
JOE WIEDMAN, Ames.
DAVID L. SAVAGE, Salem.

We are glad to hear that there were a large number of new members elected and that the attendance at this Congress, had not been exceeded by any year.

The Union has the *best wishes* of the IOWA ORNITHOLOGIST.

The Pine-creeping Warbler

The writer cannot give authentic notes regarding the occurrence of *Dendroica vigorsii* in this state, as he has not his notes with him at Iowa City, (his home being at Davenport, Ia.) But in the spring of 1889 a friend and myself obtained several specimens near Davenport, and in fact they were not uncommon for a short time, and I can state that I killed and positively identified several specimens at that time. I think it has never been included in any list of Iowa birds. With the evidence of J. Eugene Law (IOWA ORNITHOLOGIST, Vol. 1. p. 17.) and with what I have given I think that this species should be included in the list of Mniotiltidæ of Iowa.

J. H. BROWN.

(The Report of the commitee on State Fauna—published in the "Proceedings of the Iowa Academy of Sciences," Vol. 1 Part 3—states that a specimen was taken in Johnson Co. Iowa, in the spring of 1892. Specimen in University museum.—ED.)

THE IOWA ORNITHOLOGIST.

A Quarterly Magazine
Devoted to the Study of
Ornithology and Oology.

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DAVID L. SAVAGE,
Salem, Iowa.

We desire to extend our thanks to Lynds Jones, of Oberlin, Ohio, for the kindness of sending in his notes on the birds under *special study*. He formerly lived at Grinnell, Iowa, and these notes were collected near that place during his stay there, which was from 1885 to 1890. Mr. Jones is a close observer and an ardent lover of the birds, and when he removed from the Hawkeye state, we lost one of our most enthusiastic Ornithologists; however we are glad to know that he is still interested in Iowa.

The *Nidiologist* is undoubtedly one of the most interesting publications of its kind. The December issue, which is Vol. 2, No. 4, contains six beautiful illustrations of bird life.

Frank H. Lattin, of Albion, N. Y. writes that on Feb. 2, 1895 he will publish the initial number of the *Natural Science News*, an eight-page Weekly Journal, which will be devoted exclusively to Natural History. The subscription price will be $1.00 per annum. We wish Mr. Lattin the *greatest* success possible, in his new enterprize.

The notes on *Tyrannidæ* which are published in this issue were compiled by J. Eugene Law, of Perry, Ia. Those on *Alaudidæ* by Jno. V. Crone, of Marathon, Ia., and the notes on *Icteridæ* by the Editor, as W. W. Searles, Lime Springs, Ia., did not have

time to compile them. Mr. Searles is doing a large business in the Taxidermical line. He anticipates taking a trip in the Dakota's this spring, collecting birds. He expects to start early in April and to remain about six weeks.

We are in receipt of No's. 1, and 2, Vol. 1. of the *Museum*, a 36 page monthly magazine, edited by W. F. Webb, Albion, N. Y. It is "devoted exclusively to research in Natural Science", although nearly one-half of these numbers are devoted to ornithology. This magazine is worth much more than the subscription price, which is only $1.00 per annum. It will certainly receive the support of all lovers of nature.

Guy C. Rich, of Sioux City, Ia., writes of having added a few new names to his private list of birds found in his neighborhood. The latest are;

Least Bittern — *Botaurus exilis.*
Glossy Ibis — *Plegadis autumnalis.*
Red-shafted Flicker — *Colaptes cafer.*
Double-crested Cormorant — *Phalacrocorax dilophus.*
Pigeon Hawk —*Falco columbarius.*

He asks, is it common to find the Red-shafted Flicker in this state? He shot one in September 1894. It was in good plumage. (I think that this is the first record of *Colaptes cafer* being found in Iowa.—ED.)

A New Scheme.—We have just entered upon a New Year. The old year–1894–is now a thing of the past. Yet doubtless all of us enjoy meditating upon the many blessings – the rare finds in the ornithological field, as well as the numberless others – that God so bountifully outpoured upon us during the past year.

The old saying is that, "a pleasure shared is a pleasure doubled", hence the Editor's scheme is that each active member of the I. O. A. write an account of his rarest find in the ornithological and oological field, for 1894. We want you to write the same on the back of a postal card or on a sheet of paper,–only writing on one side of the paper– and mail to the IOWA ORNITHOLOGIST. before the 15th of February. Give the article a short suitable heading and at the end sign your name and address. These articles will be published in the IOWA ORNITHOLOGIST under the heading of "General Notes of Interest."

Iowa Ornithological Association.

In the last IOWA ORNITHOLOGIST we requested that *each* active memberof the I. O. A. send in his notes on the families; *Tyrannidae*, *Alaudidae*, and *Icteridae*. Only twelve members responded to this request. Under the circumstances it is impossible to give as full a report on these families, as could be desired, as twelve cannot be expected to cover the whole field. Now we have for *special study* this quarter, the families; *Corvidae*, *Tanagridae*, and *Hirundinidae*.

The active members of the I. O. A. are requested to send their notes (which should be as complete as possible), on all of the species of the family *Corvidae* (Crows, etc.) to the Editor of this magazine, on or before the 20th day of February, 1895. The notes on the family *Tanagridae* (Tanagers) are to be sent to J. Eugene Law, Perry, Ia., on or before the date, March 1, 1895. Mr. John V. Crone, Marathon, Ia. will be ready to compile the notes on the family *Hirundinidae* (Swallows) by the 1st of March. Be sure and have your notes in promptly by that time.

It is your *duty* as an active member of the Association, to look over your notes, and anything and everything that you have of interest on these families, just jot it down and send it to the persons named above. It is *very* important that your notes should be in by the dates specified. The following resolution has been approved by the Executive Council:

Resolved, That we submit the following names of applicants for active membership, for publication in this magazine;

21. Peter Arildson, Rock Rapids.
22. J. H. Brown, Iowa City.
23. Hiram Heaton, Glendale.
24. Mrs. Gus Walters, Mount Pleasant.
25. Frank H. Shoemaker, Hampton.
26. Carl Fritz Henning, Boone.

If there are no objections to the above named persons they stand elected.

Any further information concerning the I. O. A. will be gladly furnished by the Secretary. We extend a cordial invitation to all active ornithologists in the state to join our ranks.

DAVID L. SAVAGE, Sec'y.
Salem, Iowa.

A Peculiar Nesting Site.

It was early during the collecting of the spring of 1890 that my attention was called to the peculiar nesting site of a pair of Yellow-shafted Flickers which I shall describe.

On a small hill about a quarter of a mile distant from my home stood a haystack which had been placed there two years prior to the time of which I write. The neighbor to whom the stack belonged cut it through the middle and hauled away one portion of it, leaving the other standing with one end smoothly trimmed.

Soon after the opening of the following spring when I happened to pass that way I saw a pair of Yellow-shafted Flickers about the stack, which showed signs of wanting to make that a "fixed habitation."

One bright morning a few days later when passing I was greatly amused at the efforts of one of the pair. It was clinging to the perpendicular end of the stack, and throwing out chipped straw from an excavation which it was at work on at a rate to defy competition.

The work on the excavation was continued through nearly a week. Of course it was interspersed with frequent romps and song and games of peek-a-boo around the fence posts, a very characteristic performance for Flickers which have hit on a nesting site and are progressing in its completion.

When completed the excavation was about twenty inches deep. The entrance was made eight feet or more above the ground. The burrow was two and one-half inches in diameter and dug directly into the stack for six inches then turned directly downward and was slightly enlarged at the bottom.

The nest was composed of chips of straw. The depositing of the eggs soon followed the completion of the nest, and on the 28th of May 1890, I took a fine set of seven eggs which are at present in my collection.

The pair lingered around and after the usual time deposited a second set which was taken June 14th.

The birds centered about the place until autumn. During that winter the portion of stack was removed.

The Flickers returned the following spring and after a brief sojourn they left for parts unknown.

I never have been quite able to understand the philosophy of this nesting site, for woodland is abundant here. A wooded creek was less than half a mile distant while large orchards and groves abound on every hand. Was it not sheer laziness on their part?

WILL A. BRYAN, —*Oologist.*

New Sharon, Ia.

General Notes of Interest.

TWO RARE BIRDS IN MARSHALL CO., IA.—I saw the first Mocking Bird I ever observed in this Co,. on Sept. 3, 1894. Dr. Coues says "rare north of 38°, although known to reach 42°." The latitude here is a little above 42°. I shot the bird and made the identification positive. He was in a walnut tree in company with about thirty Kingbirds, that I suppose were preparing for their migration South.

On October 10, '94 I saw a Swallow-tailed Kite, apparently on its migration. This is the only bird of this species I have seen this season. There was one killed near here last year.—A. P. Godley.

THE SAW-WHET OWL.—I should like to announce the capture of two Saw-whet Owls. Taken at Iowa City, Ia., by myself on Oct. 16 and 26, 1894. These are the first records for Johnson Co.—Paul Bartsch.

On November 3, 1894, while out in the woods near Perry, Ia. I was attracted by a number of Blue Jays that were making a great racket, and upon investigation found that they were making life miserable for a little *Nyctala acadica*. I did not see it until it flew, but following in the direction it went, I happened to see it, then a load of 12s from my little Stephen's turned him over but did not drop him, for he hung with with his claws securely wrapped around the small limb. After a nice little climb of twenty feet up a shell-bark hickory, he was secured. His stomach was perfectly empty although this was in the morning.—J. Eugene Law.

THE RED-HEADED WOODPECKER.—Mr. A. P. Godley, of LeGrand, Ia, writes of seeing a specimen of this species on March 19, 1894, he thinks it surely must have been lost, as he did not see Master Red-head again until in May.

TWO RECORDS FROM KEOKUK, IOWA.— On the 16th of December 1892, I shot a specimen of *Junco hyemalis shufeldti* on the Illinois shore, just opposite the city. It was with several other Juncos, all, as far as I could tell, of the common variety.

On the 10th of November, 1894, a boy brought me a *Somateria spectabilis* that he had shot on the Mississippi. It was a male in brown plumage, but showing a few white and black feathers. The stomach contained nothing but fine quartz gravel.—Wm. E. Praeger, Keokuk, Iowa.—*Auk.*

WANTS, EXCHANGES AND FOR SALES.

Brief special announcements, "Wants", "Exchanges", "For Sales", inserted in this department, *free* to all Members of the I. O. A., and to all subscribers of the IOWA ORNITHOLOGIST. "DEALERS" can use these columns at *Regular Advertising Rates only.*

To Exchange.—Skins and eggs all A1, with full data from this state, for such as are not in collection. Send list and receive mine. Paul Bartsch, 131 S. Capitol St. Iowa City, Iowa.

Encyclopedias.—A set of Chamber's, 8 vols., cost $16.50; a set of Johnson's 8 vols. cost $56; and a set of Appleton's 16 vols. cost $96. I want a camera, 5x7 preferred, or a 16 or 20 ga. hammerless shot gun or offers. Send full description of what you have. J. H. Brown, 113 Prentiss St. Iowa City, Iowa.

Wanted.—Ornithological books especially Coue's Key, also back vols. of *Oologist*, from Vol. 1 to 9. Any person having the above please write, stating condition and lowest cash price. David L. Savage, Salem, Iowa.

Exchange Notice.—Ridgway's Manual, new. to exchange for Coue's Key, latest edition. H. J. Giddings, Sabula, Iowa.

To Exchange.—Bird skins of this locality, for skins of other localities, or for curiosities. Send list. Wilmon Newell, Hull, Ia.

Attention.—An Ad. in the April IOWA ORNITHOLOGIST. will go to every enthusiastic collector in the United States. If you have any thing you want to sell or exchange do not fail to send in copy at once. David L. Savage, Publisher, Salem, Iowa.

"K. I. C. Standard Datas".—The neatest and most complete out. Bound in books of 100 each, with detachable stubs. They are sure to please you. 30cts. per 100 datas. Will exchange for desirable and reliable sets. We wish to place a sample of these datas in the hands of every reader of the IOWA ORNITHOLOGIST. Send stamp for samples. Kerr, Irons, and Co. Council Bluffs, Iowa.

Exchange Notice.—I have the following first class sets with data to exchange for other sets:—A. O. U. No's. —316, 6-2; 444, 1 3; 466a, 1-3; 488, 1-4; 495; 498, 1-5 1-4; 501, 1-5; 511b, 1-3; 529, 1-3; 560, 2-3; 604, 1-4; 705, 1-4; 704, 2-4. I would like to correspond with live Botanists in regard to collection and exchange of named plants, either mounted or unmounted. Carleton R. Ball, Little Rock, Iowa.

Make a cash or exchange offer on a camera. Takes a photograph 2½x4. Good condition, nearly new. This is the celebrated Harvard camera. It goes to the highest bidder. W. H. Maycock, Salem Iowa.

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I have made arrangements to handle his entire take of everything in this new field, and am just beginning to get in shipments of Birds and Mammals. No eggs will of course be taken until early in '95, when all my old friends may look for some new species that have never been offered before.

I append below a list of Skins now on hand. All are of brilliant plumage, *much* finer than we get in the North as a rule. Of nearly all I have a few series. I also have a number of species as Boatbill, Currassow, Mexican Black Hawk, Mexican Goshawk and many other that I dare not list as I have such a small series, am sure to run short. If you wish any not listed below, send orders and and they will be booked and filled as soon as possible.

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Trogan ambigus; Coppery-tailed Trogan	3 00
Rupornis Griseicanda; Grey-tailed Hawk	1 00
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Ceryle cabanisi; Texan Kingfisher	90

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Attention.

Although this is only the second issue, the Iowa Ornithologist has already made many warm friends all over the country, judging from the subscriptions, advertisements, and many encouraging letters received. We hereby thank our many friends for their kind support.

We send out several hundred sample copies of this issue, if you receive one of them, send in your subscription at once; because the next SAMPLE COPY may not come to YOU. You can't afford to miss it, so subscribe NOW! Forty cents, only, will insure you one year's subscription, four numbers, and every one interesting, valuable and nicely illustrated. And in addition you will be helping on the good work of establishing an Ornithological magazine in the Mississippi Valley. Those who wish to commence their subscription with the first number can do so.

The following is the contents of that number,

VOL. I. NO. I.

Notes on the Birds of Iowa, (Fringilladae, Mniotiltidae)
The Crossbill in Iowa.
Bird Migration in the Mississippi Valley.
The Opening Address.
The Iowa Ornithological Association.
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THE

IOWA ORNITHOLOGIST.

VOL. 1. NO. 3.

APRIL, 1895.

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CONTENTS.

Our Association - - - - Page 53

Notes on the Birds of Iowa - - - 55
Corvidae, Tanagridae, Hirundinidae.

The Hooded Warbler - - - - 67

Constitution of the I. O. A. - - - 70

General Notes of Interest - - - - 73

G. L. TOMLINSON. Printer.

BLUE JAY.

Cyanocitta cristata.

THE Iowa Ornithologist

ORNITHOLOGY OOLOGY

VOL. 1. SALEM, IOWA. APRIL, 1895. NO 3.

Our Association.

The Spring has once more come with her bright sunshine, and daily, her harbingers, the birds, arrive, each migration bringing fresh life and song to the woodland and meadow. How glad our hearts and how buoyant our spirits as we take our first walks and rambles over the old-time paths, to our collecting grounds.

While the snow yet lay in the woods, many of us spent days in search of *Bubo virginianus* with what results, each can tell.

Then came the Red-tailed Hawk, returning to the usual nest, reminding us that the time is near when we must collect "rents." To the enthusiastic Naturalist every blade of grass, every green leaf and bud tells of the approach of the collecting season, and of happy hours with our friends, the birds.

But in the enthusiasm and excitement of the season's collecting we must not forget our association. We organized it for mutual benefit and exchange of notes, and I am sure no one will deny that it has been of great benefit and advantage to all of us. This, our magazine, has been improved from time to time, and although still in its infancy, it can boast of a reasonable degree of success. Our organization was not a financial venture, but one of common benefit and increase of knowledge. By it, our scope of view is enlarged and we are led to look beyond the narrow confines of our individual observations.

Nature is broad, free, unlimit-

ed but we often regard it as narrow, because we look from a narrow stand point. By the intercourse of our association we see things in a different light. If our methods have been good before, by comparison with those of others, we become better satisfied with our own lot. If they have been faulty, we are afforded an opportunity to rectify and improve them.

Now is the time to interest new members. Now is the time to recruit our ranks. Let us make our association a certainty, and place it on a firm financial basis. One of the ways of accomplishing this, is to make our "IOWA ORNITHOLOGIST" an interesting and desirable publication. This can be done by each of us sending in our notes and observations on the birds, for in this feature lies one of the most important points of interest.

By taking an individual interest we can close this, our first year, with credit to ourselves and begin a new year with the brightest prospects for many succeeding ones.

ERNEST IRONS, PRES.
Council Bluffs, Ia.

Red-headed Woodpecker in Jackson Co.

Latitude 42.

This species is common in this county, wherever suitable locations. They usually nest in large trees, but when these are not handy they make use of smaller ones, and sometimes telegraph poles. Their food is mostly insects, however they sometimes eat fruit, and on certain occasions they eat corn. In the summer of 1889 a pair had a nest in a poplar tree, the hole 15 feet from the ground. This was near a farm house. At first the birds seem to feed entirely on insects, but after a time they learned to take corn with the pigs, coming every time the pigs were fed to pick up the corn from the ground. After the young were hatched, the old birds would come regularly and carry corn to the nest, so the little birds must have been fed principally upon it. Most of the birds do not arrive in the spring, until early in May. A few of them straggle along much earlier. I have several times noted specimens in March. In the autumn they usually depart about the last of September, although on a few occasions, I have seen them in November. But I had thought that these were the extremes. However this season breaks my record as a few of them remained all winter. I give a few dates on which I noted them; December 24th, January 2nd, 10th, and on the 23d. two specimens were seen. Februrary 7th it was 10° below zero and a high wind blowing, one specimen was seen; and on February 12th saw another.

H. J. GIDDINGS.

Notes on The Birds of Iowa.

ORDER PASSERES.

Perching Birds.

SUBORDER CLAMATORES.

Songless Perching Birds.

FAMILY CORVIDÆ.

Crows, Jays, Etc.

Eleven of the members of the Association, from as many counties, have reported on this family in our state. It is represented by three species; you will note that Clarke's Nutcracker, reported by Carl Fritz Henning, is the first record of this species being found in Iowa. The first on the list,

477. Cyanocitta cristata. (Linn.)

BLUE JAY.

"Resident species. Common. Nesting in trees, both in deep woods and in door-yards. Have seen nests in door-yards in Forest City, Clear Lake and Independence, Iowa. Sometimes when the nests are built near houses, the birds are considered a nuisance as they will make a great noise and fly down at a person who goes near the nest. The first set of eggs is laid the last week of April or first week of May and second sets are found during the whole month of June. Three, four or five eggs constitute a set. The first sets, taken early in the season usually contain more eggs than those taken later. The eggs show considerable variation in shape and color. The usual color is dull greenish with small brownish and blackish spots, though I have taken a set of four eggs with a light brownish colored ground color, resembling eggs of the White-rumped Shrike. A flock of Blue Jays will frequently gather around an Owl and make a great noise, a habit which is also possessed by the Crows." (R. M. Anderson.) "This species is a resident throughout the year, though the larger number leave in the fall, at which time they collect in large flocks. The nesting season is May. The eggs are ordinarily five in number, and subject to great variation in shape and color. The ground color varies from olive brown or drab to a greenish tint, and the markings, sometimes blotches and sometimes small spots, range through many shades of brown. An average size is 1.15x.83. The nest is composed of twigs, roots, and vegetable fibers, lined with hair, placed in bushes or trees from 10 to 30 feet up. The Blue Jay does not stand as a representative of the avian world; he is sly and cunning to a degree which excites our admiration, while he is so cruel that by many he is detested. I have seen him destroying eggs in the nest of the

Brown Thrush and the Robin and killing the young of the Catbird." (Frank H. Shoemaker.) "This truly handsome bird is a resident in Boone County the year round—nearly every day I see him at my suburban home and a gay fellow he is too—always saucy and noisy. My home, a mile from the business center, is an ideal one for a lover of nature and is known to my Naturalist friends as "Birds Home." This beautiful place covers two blocks. In the orchard nest Robins, Orioles, Catbirds, Blue Jays and Wrens. In the vineyard among the currant and raspberry bushes, the Warblers make their home, with here and there a Catbird or Thrush, rarely a Cuckoo. The maple grove is alive with Grackles and their bulky nests are everywhere. Kingbirds and a single pair of Turtle Doves have taken up their abode near by. Here in a blasted maple that was struck by lightning two years ago the Flicker has made a home and raised a nest full of hungry, noisy Flickers. A small creek passes diagonally through the northern part of Birds Home, the strip of land on each side of the creek is during summer the protected home of the Meadow Larks, Bartramian Sandpiper, Horned Lark and Dickcissel. Along the hedges our favorite Bobwhite finds a suitable place to build its nest and rear its young. Yonder in that old fence post the Bluebird last year had its nest and four tiny blue eggs. The lawn is a favorite place for Robins, Thrushes, Jays and during some seasons of the year vast numbers of Flickers claim this a feeding ground. During winter the Blue Jays are the noisiest of the feathered friends that remain to brave the snow storms and chilling winds that sweep across Birds Home. The Hairy and Downy Woodpecker on fine days are plentiful in the grove busily engaged in getting their multifarious food. Sparrows and Juncos come and go. The Crows in the morning leave their winter roost in the woods near by and go to their feeding grounds, returning in the evening. It is during spring that the Blue Jays gather here in numbers, then their notes are many and various. His saucy *chay, chay, chay*, must be familiar to all who know him. His other notes *pwilhilly, pwilhilly*, and *chillack, chillack*, are not so well known. When a boy I walked over a mile to discover what bird it was that uttered the above notes. I must say I was rather disappointed when I found out that the notes came from Master Jay, but there was consolation in the thought that I was not to be fooled again. In this county during the breeding season the Blue Jay is partial to orchards, to osage trees along quiet roadways; or lanes or will

nest in the branch of a lonely forest tree, the nest is bulky, and made of twigs vegetable fibres, roots, leaves etc. One nest in my collection that I highly prize has a piece of newspaper strongly interwoven with vegetable fibers and rootlets and contains an article on agriculture. Was this Jay a farmer? Nests May and June."(Carl Fritz Henning.) "This is a very common species in Marshall Co. making its abode here during the year. When food is scarce in it may be often seen about the dooryards and in spring it often builds its nest in some quiet spot near a dwelling. In late summer it more or less retires to the woods where it may remain unmolested until hunger again drives it to the habitation of man, where it is generally unwelcome.

The nest is begun early in April and by the second week in April full sets are to be had. In this locality I find the nest to be placed rather low, more often less than ten feet from the ground than more than that distance. A thorny bush is often chosen for a nesting site. The composition is various materials; commonly twigs, roots, rags, strings, paper, etc., lined with rootlets. Dr. Coues gives the number of eggs constituting a set to be five or six; I have never found more than five and often find only four. The eggs are olive in color, spotted with lilac and black; spots being thickest about the larger end."(A. P. Godley.) "Cyanocitta cristata is abundant the year round seeming more so in early spring about the cities, and in midwinter prefering woods near some farmers corn crib. Breeds in all sorts of locations. Have often seen it destroying eggs and on one occasion the young of other birds, and once saw one kill a young chicken."(J. H. Brown.) "Lake Mills, Winnebago Co. May 27, '93; set 1-4 fresh. Nest about 9 feet up in crotch of burr oak tree against the trunk. Nest composed of large oak twigs, weed stalks, strings, paper, flaxen grass, and oak leaves. Lined with rather coarse roots. Lining from half to one inch thick. Largest diameter, outside 12x6 inches. Greatest depth 5. Inside diameter 3½. Depth 2.

Perry, Dallas Co., Abundant resident, most abundant in winter months. Not uncommon breeder though more retired in its breeding habits than in northern part of state. April 30, '94, saw one fly to an eave trough, snatching up as much muddy leaves as it could carry and fly immediately to nest overhanging the main avenue of the town. May 8, Set 1-5 highly incubated. Nest about 25 feet up in burr oak in large crotch. In woods. June 4, Set 1-4 fresh. 15 feet up in oak. Upper side of horizontal limb."(J Eugene Law.) "Rather common

in Mahaska County though at no time abundant. There seems to be a pair for about every farm-house. Their nest is very neatly concealed generally contains 4 to 6 nicely marked eggs, in every case coming under my observation the nest is lined with fine dark colored roots. It may be of interest to note in this connection that Mr. R. D. Goss has in his cabinet an albino of this species which was taken from a nest which contained others of the usual color. The specimen was kept as a pet for a considerable time before it came into Mr. Goss' collection". (W. A. Bryan)

488. Corvus Americanus. (Aud.)

AMERICAN CROW.

"Resident throughout the year. Common. A very wild, suspicious bird, generally very hard to approach, but sometimes a person can walk up quite close to a flock. Easily tamed when young. Nests in this vicinity are generally placed not very high from the ground, from 15 to 35 feet being the extremes which I have found. Nests are smaller than Hawk's nests, and are deeper and much more carefully built. Eggs greenish, speckled with brown, much variation in shape and color. Have found nests as follows; May 14, 1894 - nest containing six young. Apr. 14, 1894 - 4 fresh eggs, Basswood 35 ft. up. Apr. 14 1894 - 5 eggs incubation advanced. Apr. 14, 1894 -3 eggs and one young bird. May 5,1894 - 4 young and one egg, burr oak 35 ft. May 6, 1894 - 5 eggs incubation slight, burr oak 25 ft. up." (Rudolph M. Anderson.)

"The crow is very abundant in Franklin county there being no time of the year when it is not present in large numbers. Even the severest weather finds it with us. During the first ten days of February in the present year, when the temperature varied from zero to 30 degrees below, there was not a day when crows were not seen in large flocks. In this region the nesting season extends over a considerable period. Complete sets have been found April 1st. and eggs have been taken as late as the last week in May, the height of the period being about the latter part of April. The usual number of eggs in a set is 5, sometimes 4; occasionally more are laid, as I have seen several sets of 6 and 7, and have one of eight, taken by myself, in my cabinet. The eggs are extremely variable in shape, size, ground-color and markings. In my collection are eggs measuring 2.01 to 1.47 in length and from 1.25 to 1.05 in diameter. Some of the sets are of light bluish coloration, sparingly dotted over the entire surface with dark brown; others are of light sea-green color, with the surface almost covered with heavy blotch-

es and spots of brown. The spots and blotches seem to be quite uniformly dark brown, almost black, although the distribution over the surface is varied. The nest is composed of twigs, corn-stalks, leaves, roots, weeds and bark, deeply hollowed, strongly built and firmly placed; lined with grass, inner bark, hair, moss, and generally pieces of binding twine, in this locality. The height varies from 8 to 40 feet. As a scavenger the crow has no friends here, his methods are too slow to be of noticeable benefit. Though he does away with much corn in the spring time, his continued assaults upon the cut-worm are a strong point in his favor." (Frank H. Shoemaker.) "The American Crow is abundant in this county and always met with during my Ornithological rambles. In this locality it is partial to the wooded river bottoms, during the breeding season it can also be found in small groves, remaining during winter in the heavy timber along the Des Moines River bottoms and vicinity. During winter, early in the morning it is a common sight to see two or three, sometimes large flocks of crows flying across the prairie to some favorite feeding ground, toward dusk again returning to the heavy timber where they roost in large colonies. During seasons of scarcity I have observed that they eat large quantities of carrion. Wherever a dead horse, cow or dog has been dragged, usually in a slough, there can be found one or more, sometimes thirty and forty crows hard at work feeding. Stomachs examined have contained injurious insects, Indian corn, small grain and carrion. The nest is built in woods and groves. Of many sets in my collection ¾ of them were found in heavy timber, the balance in groves. The nesting season is in March, April and May. By April first the nests are generally finished in this county. The sets collected during '93 are as follows.

Set I, April 9, 1893 Ames, Iowa collected by Joe Weidman and Carl Fritz Henning. Nest in soft maple grove, 34 feet up, bird on nest. Five eggs, incubated, three of them are dark olive green thickly spotted and blotched with dark brown and fine blotches and dots of black; one is evenly marked, another heavily blotched at larger end, third, heavily blotched at smaller end; the remaining two are a lighter shade of olive green, blotched with light brown and few fine black dots, chiefly about the larger end 1.54x1.15; 1.67x1.13; 1.55x1.17; 1.55x1.16; 1.56x1.14.

Set II, April 12, 1893 Boone, Iowa; Nest in large tree 35 feet up. Crow on nest,

five eggs in set (two broken in collecting) beautiful light sea green, two eggs fine blotched and streaked with light brown, few black blotches on larger end, the remaining one heavily blotched at larger end with brown and umber. 1.70x1.19; 1.67x1.17; 1.63 x1.15.

Set III, April 16, 1893 Boone, Iowa. Nest placed in tree 30 feet up. Five eggs fresh, this is a pretty set and shows variety of markings; one is light sea green heavily blotched at the larger end with light brown, olive brown and umber. In the other eggs the ground color is a darker green, completely blotched at the larger end with dark olive green and dotted with umber and black; the remaining three are between the light and dark eggs in ground color, but very heavily marked over entire egg with brown and umber. 1.67x1.16; 1.71x1.15; 1.60x1.13; 1.68x1.17. Set IV. April 23, '93. Boone, Iowa. Nest in white oak 15 feet up, bird on nest, five eggs fresh. This is a typical set for this county; four of the eggs are sea green thickly spotted and blotched with light and dark brown, heaviest on larger end; the remaining egg a beautiful light sea green spotted and blotched with brown and umber chiefly about larger end. 1.77x 1.08; 1.77x1.12; 1.75x1.10; 1.69x1.12. Set V. Boone, Iowa. Nest in large tree, five in set, fresh. Ground color light green, entire egg covered with fine dots and blotches of light brown and umber. The markings of four are heaviest on larger end, the remaining one has a dark wreath of brown and umber on the smaller end, showing a pretty contrast to the light green. In this county I have found the Crow to prefer the heavy timber along the creek and river bottoms but have also observed them nesting in groves in suitable localities, several nests usually being in one grove. In May young Crows are plenty. May 7, '94. I found five nice fellows, 40 feet up, in heavy timber near the "Ledges". It is during this time when the glossy fellows are raising their own young, that they rob the eggs and young of other birds. During the season of '94 I took many sets of Crow's eggs—being similar to the ones taken in '93—it will not be necessary to take up more valuable space in the IOWA ORNITHOLOGIST describing colors of eggs, nests, etc. Nesting began March 22. First set taken April 1, 1894, in red oak at "Ledges."(Carl Fritz Henning.)

"Quite abundant in Story Co., inhabiting the woods along the streams and making extensive forays upon the adjacent grain-fields. Also acts as a scavenger around slaughter-houses. Nests made of sticks and weeds.

It is sometimes not more than ten or twelve feet from the ground; however it is oftener found in the top of a sycamore or walnut tree. Nest generally built about May 1st."(Wilmon Newell.)

"This is an abundant bird in Marshall county, and is a permanent resident with us. It is generally to be found in the woods, but often may be seen in open fields while searching for food. I think the Crow must destroy numerous nests of the Bob-white, as I have observed it carrying these eggs to its young. This species seems to have a spite at the Raptores, and especially at the Owls, or at any rate it will congregate in great numbers to fight them. The noise that ensues often leads the collector to find their foe and add its skin to his cabinet. On Feb. 11, I secured a Barred Owl that was so near killed by these birds that I knocked it over with a club.

The American Crow is among earliest breeders in this county. On March 25, 1893, I took a set, 1-4; this is the earliest date on which I have taken a complete set of this species. I find fresh sets, commonest in this county about April 10th. A typical nest of this locality is composed of sticks intermixed with dead grass, heavily lined with grapevine bark, binding twine, bunches of hair, and corn husks. The nesting site varies in its distance from the ground according to the general height of the surrounding trees. In light brushy timber it is often not more than fifteen feet from the ground. In Marshall county I found the number constituting a set to be from four to six; five being the most common. The eggs are extremely variable in coloration; ranging from light blue to dark olive, and from almost entirely unmarked specimens, to some so heavily marked with spots and blotches of blackish-umber, as to almost conceal the ground color."(A. P. Godley.)

"On June 1, I saw an albino Crow, pure white in color, this bird was with a brood of young Crows, and was probably raised in the spring of '94. In this locality the Crow remains all winter, and feeds on old dead horses and cattle. They will eat anything that is flesh. They nest in March and April, and prefer jack-oak trees for their nesting place. I have also found a few in wild cherry and willow trees. Five eggs are most commonly a set, but upon one occasion I found a set of (9) nine eggs in one nest." (Earl Cyril Statler.)

"A common bird. I have taken six or eight nests of this species in a half days tramp, in early spring. The nest is large and conspicuous. I have always noted that the interior of the nest is made up largely of strips of grape-vine bark. The number of eggs range from four to six

and are of a green shade with large coarse blotches and spots of dusky brown. During the season of '90 I noted in the proximity of New Sharon a very large specimen which was marked by having a very white head. I also had the pleasure of mounting a specimen taken in Story Co. in 1882 which was a dirty white color all over." (W. A. Bryan.) "No day in the year passes without many Crows being seen here at Glendale. Half a mile from my home, they have a roost. In March and April, and Sept. and Oct., hundreds gather towards evening. They make a great noise quarreling apparently, until they quiet down for the night; then just at daybreak they make a great clamor as they start on for their several fields of labor. During the winter and summer months as many do not gather at the roost. Sometimes they take fields of corn when it is just beginning to come through the ground. (H. Heaton)"

"*Corvus Americanus* abundant the year around nesting preferably in jack oaks or in saplings that have grown up tall and slender and very close together. Eggs 4 to 6 and varying considerably in coloring even in same set. They and the Jays seem to have a special pick at all of the Owls and delight in assembling and tormenting one wherever found."(J. H. Brown.)

"Is a resident both at Iowa City and Burlington. At the latter they congregate by thousands in winter, especially in the swamps just opposite Burlington; where they feed on dead fish, which are found on the banks of lakes. (Prairie slough.)Even here when in countless numbers they are quite shy and regard man as their arch enemy. Last spring I had a chance to see crows attack a Barred Owl. I had given the bird a load of twelves from my 45 bore, which proved insufficient to kill him. A Crow noticed him as he flew and at once gave the alarm; about two dozen came to aid their black companion, and to attack his Owlship. They succeeded in forcing him to the ground and now all gathered about him in a circle, and one after another would walk up to Mr. Owl and give him a whack. This was repeated until the Owl was apparently dead; when they became more bold and commenced to pick him; to which I objected. Examination showed that I had not injured him much and that he was not dead, only stunned." (Paul Bartsch.)

491. Picicorvus columbianus. (Wils.)

CLARKE'S CROW,
or NUTCRACKER.

Adult: Gray, often bleaching on the head, wings glossy black; most of the secondaries broadly tipped with white,

tail white including the under coverts; the central feathers and usually part of the next pair together with the upper coverts black. Bill and feet black; iris brown. Length 12.50; extent 22.00; wing 7.00, 8.00; tail 4.00, 4.50; tarsus 1.35; bill averaging 1.67; feet from 1.25, 1.75. Sexes alike in color, but female smaller than male. Young similar but browner ash. There is great difference in the shade in adults, the plumage when fresh being more glaucous ash wearing browner and also bleaching especially on the head. *Hab.* Coniferous belt of the West. North to Sitka, South to Mexico, East to Nebraska, West to the Coast Ranges. (Coue's Key, page 418.) "On Sept. 23, 1894, a Clarke's Nutcracker was shot by Cal. Brown, 4 miles South of this city and sent to me for identification. (This specimen was also identified by Prof. C. C. Nutting, chairman of the committee on State Fauna of the Iowa Academy of Sciences.) The bird was alone when shot in small tree, in pasture. This specimen is now in the Iowa State University Collection, and according to letters received by me from C. C. Nutting, it is the *first record* of its occurrence in Iowa." (Carl Fritz Henning.)

Family TANAGRIDÆ.

Tanagers.

608. Piranga erythromelas. (Vieill.)

SCARLET TANAGER.

"Common summer resident in Jackson Co., present in '94 from May 8, to Aug. 31. Far more abundant than is generally supposed, keeping in the tops of the trees most of the time. A fine singer. Nests in June; nest is placed on horizontal limb of forest trees, loosely constructed of stems and twigs, and lined with fine rootlets, etc. Eggs three to five, blotched and spotted with reddish brown. The only member of this family I have found here."(H. J. Giddings.) "Breeds in Des Moines and Johnson Co's. In the former I have found an orchard near a forest to be a favorite nesting place. In the latter they prefer the timber, usually placing the nest on a horizontal limb of an oak. Grossly imposed upon by the Cowbird. Have found sets of one egg of the Tanager, and three of the Cowbird. Arrived in Johnson county, May 9, 1894. A specimen, female, in in S. U. I. bears date of October 7, 1894."(Paul Bartsch.) "Common summer resident in Marshall Co. May to September. Confines itself to the woods. Never found nest but I am confident it breeds here." (A. P. Godley.)

"Is not an uncommon summer resident in Scott Co. preferring

quiet woods though before the breeding season it is seen nearly any-where. Eggs usually three sometimes four. Nest usually in oak tree."(J. H. Brown.)

"An irregular summer resident in Franklin Co. Common some years, rare others. In 1891 I saw very few; in 1892 they were quite common, I found nine sets; in 1893 not common, only two sets found; not a dozen specimens seen in the entire season of 1894. Eggs commonly laid during the first two weeks of June; have taken complete fresh sets as late as June 18, and highly incubated sets June 12 th. The nests are frail structures, composed of vine-stems and rootlets, and lined with hairs. They are placed on horizontal or slanting limbs, ten to thirty feet up, generally in open woodland. Oak or elm preferred. Eggs in my cabinet vary from .97 to .84 in length and 67 to .62 in diameter; typical .88 x.63. Eggs resemble Rose-breasted Grosbeak's, but with richer ground color and finer markings. I have found the Scarlet Tanager breeding in Hardin, Linn, and Clinton Co's. (Frank H. Shoemaker.) Wilmon Newell, of Sioux Co., does not know of its existence there. Have found it breeding in Winnebago Co., J. E. L.

610. Pirangra rubra. (Linn.)

SUMMER TANAGER.

"Not a regular bird in Scott Co. and rarely seen. May, 1889 I took my first. Have never seen more than one at a time and that only in May." (J. H. Brown.) "Rare in Marshall Co., only observed it a few times. Probably a rare breeder; although I have never found a nest." (A. P. Godley.) "I took a specimen in the spring of 1889 at Burlington, Des Moines Co. The only word I have of its capture." (Paul Bartsch.) Have never met it in Winnebago or Dallas Co's. J. E. L.

FAMILY HIRUNDINIDÆ.

Swallows.

611. Progne subis. (Linn.)

PURPLE MARTIN.

"This species arrives in Lyon Co., about April 20, and from that date may be found in small colonies, wherever nesting sites may be found.

Nesting begins in early June and continues through the month, the eggs being deposited in rough shallow nests of sticks and grass, lined with strings and feathers.

Eggs are pure white, and usually five in number.

The Martins leave for the south about Aug. 15th."(Carleton

R. Ball.) "Abundant summer resident, wherever suitable breeding places can be found. They are much annoyed by the English Sparrow's taking their breeding places before they arrive. In season of 1894, first one arrived April 7, and last one departed August 29," (H. J. Giddings, Jackson, Co.) "In Winnebago Co. May 10, '91, building nests. In Dallas, , Co. April 7, '94, reported and heard. April 12, first seen. April 16, very abundant. May 21, visited Martin box and found several nests incomplete and one with three eggs" (J. Eugene Law.)

"These birds are fairly common at Burlington and Iowa City. Arrived at the latter place April 13, '94. They never seem to associate with the rest of the family, but gather in small flocks before leading the advance of fall migration. At Burlington they nest almost exclusively beneath the head of the electric lights; building a shallow nest of mud, and straw upon the hanging board. Only a few nests in boxes." (Paul Bartsch.)

"May be regarded as a common species in Mahaska Co. though it is each year becoming scarcer. The favorite site is the "Martin box" that is placed for it in the garden or on the house roof. They do not successfully battle with *Passer domesticus*. In the fall great numbers gather in the favored resorts on wind-mills, telegraph wires, etc. The nests are often and easily secured from the boxes." (W. A. Bryan, Mahaska Co.) The Martin is a universal favorite.

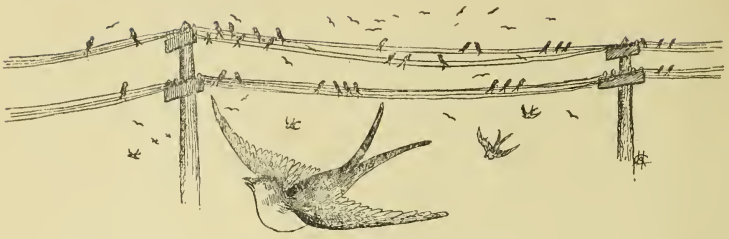
612. Petrochelidon lunifrons. (Say.)

CLIFF SWALLOWS.

Republicans.

"A common bird in Sioux Co. Is known locally as Eave Swallow. The nest is made of mud and is cone or bottle-shaped, having the opening at the small end of the cone and with a portion of the nest projecting slightly over the opening. In the absence of any high cliffs, the nest is placed under the eaves of a barn, or other building.

It is rare that a nest is found alone, the birds staying in small flocks and building from two to six nests in close proximity to each other. Along the Rock and Big Sioux Rivers, these birds build upon the faces of high perpendicular cliffs wherever these may be found. Have never noticed the nest of a Cliff Swallow upon a cliff, the face of which was less than fifteen feet high. For the last three years the Cliff Swallows have increased rapidly and they are now fully as numerous as the Barn Swallows, although they seem to live in harmony with each other." (Wilmon Newell.) "Abundant breed-



er under eaves of barns. May 19, '94. Gathering mud for nests." (J. Eugene Law, Dallas Co.) "Arrived at Iowa City, May 4th, '94." (Paul Bartsch.) "Not very common summer resident. Nests under the eaves of very high buildings such as flour mills, etc. and the bottle shaped nests are often so thickly placed as to occupy the whole space below the eaves." (C. R. Ball, Lyons, Co.) "This species occurs in Mahaska county, though not in numbers to compare with the more bluffy sections. At one group of barns and sheds I estimated that there had been in the neighborhood of a thousand birds nested during the season of 1894," (W. A. Bryan, Mahaska Co.) "Abundant summer resident but appears to be less numerous now than a few years ago. This bird is also much bothered by the English Sparrow. All of their nests which remain attached being occupied by the Sparrows when they arrive. I have witnessed several pitched battles between the Swallows and Sparrows for possession of the nests in which a good many Swallows were killed; but they came off victorious in the end. Nests made of mud, placed under the eaves of barns. Eggs 3 to 5, white spotted with brown and lilac. A friend reports seeing a pure white one last summer which remained all season." (H. J. Giddings, Jackson Co.)

613. Chelidon erythrogaster. (Bodd.)

BARN SWALLOW.

"This beautiful little bird arrives here between May 1st, and May 10, without fail, unless the season is decidedly backward. Their graceful form, cheerful manner and gentle confidence make them welcome in every farm yard; and by the 15th. of June, scarce a barn can be found that does not have, high up on the rafters, the cozy feather lined, mud palace of the Barn Swallow." (C. R. Ball)

(*Continued in next issue.*)

The Hooded Warbler.

A small slough running along at the foot of the hills, receiving from them their surplus water, and acting as an outlet for several ponds and small springs, further up the "bottom", then in its turn emptying into a larger slough which has direct connection with the Des Moines River. The amount of water in the whole controlled by the stage of the Mississippi a few miles away.

In the wet lowland, the ground is not fit for cultivation and the original timber still stands. In the higher places it has been cut away and the land is always in corn.

This leaves an irregular strip of wet woodland, in places where the giant elms, sycamore and locusts stand it is dark and shady, with little underbrush, but where the smaller maples, willows, hackberry, etc., stand it is much grown up to underbrush, covered with wild grape, ivy and other creepers, which selecting some small tree soon ,smother it. Then in the summer this whole woodland is covered with a growth of the y .r, from one to four feet high, 1 aking a dense tangle of smartweed, nettles and a tall slender, transparent weed with large leaves, apparently joined onto the main stalk without a stem, which g row in great patches in the darker and more shady places.

Such a place is the home of *Sylvania mitrata*. In the center of this jungle he builds his nest; from the trees overhead he sings to his mate, while with restless energy he catches his favorite insects. From their arrival in May to their departure in August, they seldom wander further than the edge of their thicket. Why should they? Their home is there, their favorite food is plentiful, while such nooks are a long distance apart. They are a very active bird and in song constantly while here. In their general habits and song they resemble the Red-start, but they are more frequently near the ground than the former, and the nest is always low. As to the date of their arrival, May 7, is the earliest I have any record of; May 12 and 13, the next, but by the 25th of this month they are common, and soon begin selecting their mates. By the end of the first week in June they are paired, and some have selected a nesting place. Really, I have seen nests complete on the third day of June, and containing eggs by the 10th of the month, but I find that the best time to take full sets is about the third week in June.

The nest, on acconnt of its situation, was at first very hard for me to find. You can tell little from the action of the birds, how near you are to the nest, for while they resent your presence any-

where in the neighborhood and will keep up a constant "pitting", they are such close setters that it is hard to start them from the nest and even then they will never flush directly from it but dropping to the ground, they run along that for a little distance, appearing again perhaps twenty yards away coming up suddenly out of the weeds with a few sharp "pits" and leading the collector to think that the nest is there.

I soon found that the only way to be sure about it was to beat the whole place thoroughly, and in this way I could find several nests in the course of an afternoon. The nest is usually placed in the forks of a small shrub standing in thick growth of weeds, othertimes in a strong weed itself, and often it is within a few inches of the ground in a tangle of weeds blown down by the storms, but never have I found it on the ground or near enough that a question might be raised about it. The nest is never in sight from above, but is always placed so that the weed tops are higher and growing above and over so as to completely shade and hide the setting bird. I soon found that the nest is much more easily seen from below, and on coming to a patch of rank growth that I thought contained a nest, upon getting down on hands and knees and looking around, the nests could easily be seen, as most of the leaves on the weeds were near the tops, and very little hidden from below. Of course this could only be done where the weeds were tall. In the low growth, I take a stick and parting the vegetation, or knocking it flat find them.

As I have said, they are very close setters, and I have had chances to examine the birds carefully, as upon parting the leaves overhead, I have found my face within a few inches of the bird on the nest and several times she has stayed there a few seconds before sliding off, to the ground, perfectly silent until she appeared again at a distance.

They are a very sensitive bird about their nest, none more so, for if the leaves are disturbed; or apparently, even if they see that you have found the nest, they will desert it. I have found many complete, and ready for the eggs, or with one or two eggs, and without touching nest or contents, have returned in a week or so, expecting to take a nice set, but always to be disappointed. The number of eggs was always the same, or the nest empty, or again the nest was tipped partly over and one or more eggs of the Cow-bird in it, and the place deserted. I never took a set unless it was complete at the time found.

The nests are placed from 4 to 30 inches from the ground; about

20 inches is the most common height. I have seen the nest compared with that of an Indigo Bunting and the comparison is good. The Warbler's nest though is smaller and not as strongly built, but the similarity is striking at first sight. Like an Indigo's the bottom of the nest is always a mass of skeletonized leaves or broad blades of grass. One nest of the Warbler I have, has a roll of birch bark worked in with the leaves. But the principal part of the nest is composed of various kinds of grass, not very neatly woven in most cases, and in some nests, the workmanship is very little better than a Field Sparrow's. The inside of the nest is a fine wiry grass, like the Vireo's, and many Warblers use. The interior is usually round, but sometimes oblong or egg-shaped.

In outside measurements, the nests will be about 3 inches high and about 2¾ wide. One nest I saw, a double nest likely, was almost 8 inches high, interior from 1¾ inches to 2 inches across, by 1¾ inches deep. The nests are not very securely fastened in the forks and wind storms often tip them out, by laying the weeds flat. I have noticed too, that the Cowbird often knocks the nest down in laying her egg in it. The eggs often vary in size, shape and coloration as much as other Warblers. But the most that I have seen were blunt at both ends, nearer coming to a point at the maller end. The ground-color is a glossy white, like what makes the Chat's eggs so beautiful, again it is tinged with a flesh color and is even more pretty. The spots are mostly confined to the larger end, often forming a beautiful wreath, again they will be small dots, arranged in an irregular manner on the end or around the larger part of the egg. The spots are red, of different shades, and when small, make the egg like that of a Redstart. There are usually cloudings of purple near the end and sometimes very heavily worked specimens will have flower-like spots of lilac. On the whole it is one of the most beautiful of eggs, and a series of sets show a great variation.

In size the average of my largest set is .70x.51, my smallest, an extremely round set of eggs, .59x .51. A common size is .68.x.49. Three is a full set, and never have I seen more. I know of no other locality near here where they are so plentiful as in this spot, but they are not uncommon throughout the wooded bottomlands, on both sides of the Mississippi near this city, and I think that a few pair would be found breeding in suitable places along the River much further north than this. The Prothonotary breeds more or less abundantly along the Mississippi the full breadth of the

state and their haunts are almost the same. Here they are seldom out of hearing of each other, the Prothonotary over the water, the Hooded Warbler at the edge.

EDMONDE S. CURRIER,
Keokuk, Ia.

THE IOWA ORNITHOLOGIST.

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Devoted to the Study of
Ornithology and Oology.

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Salem, Iowa.

We have for *special* study this quarter, the families; *Ampelidae*, *Laniidae*, and *Vireonidae*. The notes on the family *Ampelidae* (Waxwings), should be sent to J. Eugene Law, Perry, Iowa, by May 20th. Those on the family *Laniidae* (Shrikes), to the Editor by the 1st of June. The family *Vireonidae* (Vireos), will be in the hands of Jno. V. Crone, Marathon, Iowa, and all notes on the same should be in by June 5th.

Just a few words to the members, please be a little more prompt in sending in your notes, be sure and send them in by the dates specified; also have notes more complete if possible. Anything you have found of interest on these birds, send it along, it will interest someone else.

Constitution of the Iowa Ornithological Association.

Proposed, April 1st 1895.

ARTICLE I.--Name and Object.

Sec. 1.--This organization shall be known as the Iowa Ornithological Association.

Sec. 2. Its object shall be to promote a more thorough study of the birds of our state, thus awakening a truer love for them, and enabling the members to "Look through Nature up to Nature's God".

ARTICLE II.--Members.

Sec. 1.–Members shall be of three classes; Honorary, Active, and Associate.

Sec. 2.-- Honorary members. Honorary members shall be chosen for their eminence in Ornithology.

Sec. 3.–Active members. Any person, residing in the state of Iowa, may become an active member after having been elected. Active members only, shall have the power to vote.

Sec. 4-- Associate members. Any person, residing outside of the state of Iowa, may become an associate member after having been elected.

ARTICLE III.--Officers.

Sec. 1.-- The officers of the Association shall be President, Vice President, Secretary, Editor-tres-

urer, and an Executive Council of three(3) members.

Sec.2.–No member shall hold more than one office at any one time.

ARTICLE IV.--Duties of Officers.

Sec.1.-- Duties of the President. The President shall be the official head of the Association and it shall be his duty to preside at any of the meetings; to enforce a due observance of the Constitution and By-laws; and to perform such other duties as may pertain to thisoffice.

Sec. 2.–Duties of Vice-President It shall be the duty of the Vice President to perform the duties of the President in case of his being absent or otherwise engaged.

Sec. 3.--Duties of the Secretary. It shall be the duty of the Secretary to conduct the correspondence of the Association; to keep a history of the Association; to keep a record of its members and officers; and to notify persons of their election to membership, and members of their election to office.

Sec. 4.-- Duties of the Editor-treasurer. This officer shall be the Editor-in-chief of the official organ and shall have power with the consent of the President and Secretary, to purchase such supplies as may be needed in its publication.

He shall receive and have charge of all moneys belonging to the Association, and shall pay such bills as are approved and endorsed by the President and Secretary. He shall publish in each issue of the official organ, a report of all receipts and expenditures made by him during the preceding quarter.

Sec. 5,--Duties of the Executive Council. They shall ballot upon the names of all candidates for membership and a two-thirds vote of the Council shall be required to elect a candidate.

The Chairman of the Council shall notify the Secretary of all persons elected to membership. They shall furnish for publication in each issue of the official organ a report of their proceedings. In all cases not otherwise provided for, the Executive Council shall have supreme power; *provided*, that when their vote is not unanimous, the vote of the President of the Association shall decide.

ARTICLE V.-Election of officers.

Sec. 1.--The election of officers shall be held annually, on the 15th. day of June.

Sec. 2.--The officers of the Association shall be nominated and elected by ballot of the active members and shall be chosen from among the active members.

Sec.3.--Manner of Nomination. On or before the 10th. day of March each active member shall send to the Secretary the names of the members nominated dy him for the various offices.

Sec. 4.--The Secretary shall count and place on file these ballots and shall publish in the succeeding April number of the official organ the names of the two (2) candidates, for the offices of President, and Vice--President, Secretary, and Editor--treasurer, who received the higher number of nominating votes, and the names of the six (6) candidates for the offices of Executive Council, who received the higher number of ballots.

Sec. 5.--In case a member shall receive enough nominating ballots for each of two different offices to make him the nominee of each of

those offices under Sec. 4 of this Article, he shall be declared the nominee of that *one* office for which he received the greater number of votes, and he shall not be nominee of that office for which he received the lesser number of votes,

Sec. 6. -- Election of officers. Between the first and tenth days of June, each active members shall send to the Secretary his ballot for one candidate for each office to be filled, said candidate to be selected from the list of candidates published in the preceeding April number of the official organ.

On the 15th, day of June, the Secretary shall count and place on file those ballots and the one candidate for each office who receives the highest number of votes shall be declared elected.

ARTICLE VI.-- Salaries of Officers.

Sec. 1.--The officers of the Iowa Ornithological Association shall receive no salary, but each officer shall be allowed the actual amount expended by him for the purchase of stationery, postage, etc., used by him for the Association.

ARTICLE VII.--The Official Organ.

Sec. 1. --The official organ of the Association shall be a quarterly journal, known as the "Iowa Ornithologist."

Sec.--It shall contain the report of the officers together with such notes and special articles as the Editor-in-chief and his assistants may decide upon.

ARTICLE VIII. Meetings.

Sec. 1.-- An annual meeting may be held at such time and place as a majority of the active members may desire.

ARTICLE IX. Motions.

Sec. 1.-- An active member shall have the right to submit any motion to a vote of the Association. The motion must be seconded by an active member, shall be published in the official organ, and shall not be balloted upon for thirty days after date of publication.

ARTICLE X. Amendments.

Sec. 1.--An amendment to this Coustitution may be adopted by a two-thirds vote of the active members.

Sec. 2 -- All proposed amendments shall be published in the official organ, and balloting upon such amendment shall not take for at least thirty (30) days after publication.

BY-LAWS.

Sec. 1.-- Each active member shall be required to send to the Editor, or to such person as he may direct, any notes he may have upon the families which are under special consideration in the succeeding issue of the official organ.

Sec. 2.-- Associate members may furnish notes on the families if they so desire and both active and

associate members are requested to furnish from time to time such special articles of interest as their work and observation may provide them with.

Sec. 3.-- Names of candidates for membership may be proposed by active or associate members and such proposal should be accompanied by such recommendations of the proposed candidate as the proposer may have in his possession.

Sec. 4.-- The President shall have power to appoint a committee of three (3) active members to assist the Editor-in-chief.

Sec. 5.-- The candidate for Executive Coucilmen, who shall receive the highest number of electing ballots shall be the Chairman of the Executive Council.

Sec. 6.-- In case two candidiates for the same office shall receive each an equal number of electing ballots, that one, who received the highest number of nominating ballots shall be declared elected.

Sec 7.-- The annual dues of active members shall be fifty (50) cents, and of associate members shall be forty (40) cents.

Sec. 8.-- The IOWA ORNITHOLOGIST shall be sent free to all members of the Iowa Ornithological Association.

Sec. 9.-- The Constitutions of this Association shall be kept by the Secretary. Each member of the Association shall be entitled to one copy, free of charge, but for all subsequent copies he shall be charged 10 cts. per copy.

Sec. 10.-- The By-laws may be amended by a two-thirds vote of the active members.

C. R. BALL.
Wm. A. BRYAN. } Ex. Council.
E. B. WEBSTER.

Votes of the active members, regarding the acceptance or rejection of the *revised* Constitution, must be sent to the Secretary by the 1st day of May.

DAVID L. SAVAGE. Sec'y.

General Notes of Interest.

ODD NESTING OF THE BRONZED GRACKLE.— May 21, 1893, I took a ramble east of town across the prairie toward "Woodpecker Row", so called because there are about 50 stumps (formerly cottonwood trees) now used for fence posts, they are nearly all occupied by the Golden winged Woodpecker. Going along the row, tapping with a stick on each post imagine my surprise at seeing a Bronzed Grackle fly out of one of the hollow posts. It flew across the road and lit on a fence post. The Flickers' old home was lined with grasses and mud; the inner lining with fine grasses, and hair. The nest contained five eggs, incubated; this is the first record that I can find of the

Grackle nesting in a hollow stump or tree. What has been your experience?—Carl Fritz Henning.

Birds In Winter.

The latter part of January and the early part of February was very cold with drifting snows, and the crumbs that were swept out of the kitchen were a great treat to the birds. Scores of Juncos came, and a great many Chick-a-dees, three Red-headed Woodpeckers, two Downy Woodpeckers, one Great Northern Shrike came and sat in a tree in the yard, (but I did not see it alight on the ground), one Flicker, several hundred Tree Sparrows came into the yard many times; several flocks of Cedar-birds, two Turtle Doves (Feb. 11, and 12). one Robin Jan. 3rd., and two on Jan. 6th., two or three Nuthatches, more than a dozen Blue Jays; all of them eager to to get their share of the dainties. Thirteen Prairie-horned Larks, and a large number of Crows were constantly about the feed lot. Strange to say, the English Sparrows seemed to leave during the very cold weather, but returned the first mild day. This was the scene about my home during that severe weather.—H. Heaton, Glendale, Iowa.

"From the Dead the Living Came."—On June 18, 1894, while out collecting along the Iowa River, I noticed a House Wren fly from the remains of a Turtle, which was fastened by the tail to a fence post. On examining, I found the shell to contain a Wren's nest holding seven young.

The flesh had decayed away, leaving the cavity for the nest.

This is the first instance of such a nesting site I have observed.—A. P. Godley, LeGrand, Iowa.

Red-shafted Flicker.

The following is a letter received from D. H. Talbot, Sioux, City, Iowa. Dated Feb. 7th. 1895.

Dear Sir:-

I am in receipt of a copy of the Iowa Ornithologist, for which please accept thanks. In looking over the notes therein, I observe that you refer to the notes given you by Guy C. Rich, of Sioux City, Iowa in which he refers to the Red-shafted Flicker, as having been observed by him in that locality, and you in commenting on the same, state that you think it is the first record of this bird being found in Iowa. Briefly, I must say, that while the bird is not common in this part of the state, yet it is very frequently found. I have observed it here nearly every season for 20 odd years and have secured quite a number of specimens, including several hybrids, as I suppose them to be the offspring representing the crosses between the Red-shafted and Yellow-shafted Flicker.

Very truly,

D. H. Talbot.

WANTS, EXCHANGES AND FOR SALES.

Brief special announcements, "Wants" "Exchanges" "For Sales", inserted in this department, *free* to all Members of the I. O. A., and to all subscribers of the IOWA ORNITHOLOGIST. "DEALERS" can use these columns at *Regular Advertising Rates only.*

CHINESE COINS, bird's skins, and curios to exchange for sets of eggs, and mounted specimens. F. R. Stearns, Sac City, Iowa.

Eggs of this locality and set of Oologist's tools to exchange for eggs, books, or magazines. Fine ladies or gents', '94 Model Crescent Bicycle for sale cheap, for cash. Write for further information. W. W. Loomis, Clermont, Iowa.

TO EXCHANGE. Bb cornet and case complete, also sets and singles; for sets and singles not in my collection. Many common sets wanted. Clarence Hartinger, Alden, Ia.

WANTED.—Vol. 1 and 2 of Oologist Journal, of Poughkeepsie, N. Y. Collectors Monthly, Vol. 1 and 2. Taxidermist, Vol. 1 and 2. Maine Ornithologist and Oologist, Vol. 1 and 2. Nidiologist, Vol. 1. Will give in exchange bird's eggs. Sets and singles. All letters answered. W. J. Wirt, Box 137, Gaines N. Y.

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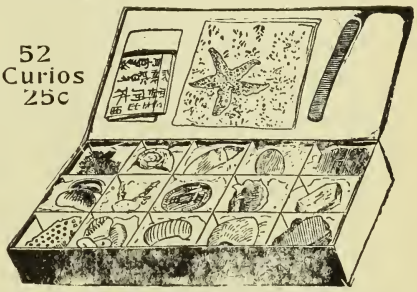
WANTED. —A good folding boat, Mimeograph or Hectograph, for which I offer good skins. Will also exchange skins. Paul Bartsch. 131 S. Capital St. Iowa City. Ia.



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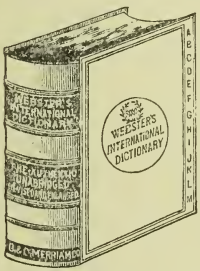

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Anas discors.

THE Iowa Ornithologist

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The Blue-winged Teal.

The Blue-winged Teal is the most common summer resident of the Ducks found in this vicinity, exceeding the Mallard in numbers during the summer months. This species arrives from the South rather later in the spring than most other Ducks, and departs in the fall before the greater flights of Ducks and Geese from the Northland.

Though not as handsome a bird as some of the other species of the Ducks, the Blue-winged Teal is nevertheless a very fine appearing bird, with a dark colored head, somewhat iridescent, and a white crescent in front of the eye. The female is dull, streaked and mottled with brownish; paler below. The wing coverts of both sexes are of a clear sky blue and the bird is thus readily identified at sight. The young of this species are hatched about the middle of June, and the downy little Ducks leave the nest as soon as the shell is off their backs. Fresh eggs may be found from the middle to the last of May. The nest is built on dry ground, generally not far from a marsh, or other body of water, being a slight hollow in the ground lined with dry grass and soft dark gray down from the Ducks breast; each tiny pellet having a light colored center, fringed with darker color, which gives the down of the nest a speckled appearance. Indeed the down of some species of Ducks shows more variation than their eggs.

A few Duck's nests of down make a beautiful addition to a collection, being of much more interest than sets of the plainly colored eggs.

On the 3rd of June, 1894, some boys offered to show me a nest of the Blue-winged Teal. Though almost the exact location of the nest was known, we walked over the small area of ground several times before finding it, as the grass was about eight inches high, and the dark gray down was pulled snugly over the ten eggs, which were thus kept warm and rendered entirely invisible. The nest was on dry ground in a meadow, a few rods from a slough, and composed of fine dried grass and soft little bunches of gray down placed in a small hollow in the ground. As no Duck could be seen around, we concluded to leave the eggs for further reference. The Duck was probably off recuperating, as it was the middle of a warm afternoon, and the sun was hot enough to keep the eggs warm. Early next morning I went after the nest. After walking around the meadow quite a while trying to find it, the female Teal flew up from the nest right in front of my feet. She fluttered awkwardly along, just skimming the top of the grass. until she was about ten rods away, when she rose up and flew out of sight. The eggs were advanced in incubation. They were of an elongated oval shape and pale buffy or creamy in color. June 12th, 1894 I purchased a set of ten eggs which were taken the day before in Madison township, Hancock Co., Iowa. This must have been a second set of the season, as the eggs were fresh.

R. M. ANDERSON.

Our Boyhood Days.

"Oh! for the good old days of yore". How often we hear this quoted, and many imagine that it means when times were better, when men were better, and when the world was better. Now I am happy to say I am no Pessimist, but an Optimist, believing that the world or the inhabitants thereof are growing better daily. Yet, that people should look back to those "Good old days" (our *boyhood* days) and imagine they were better days than now, when the stern realities of life have settled down upon us, is not to be wondered at, for I think the *happiest time* of man's existence is when he has arrived at that age when he is old enough to romp and play, to visit the grand old woods and meadows and study *Nature* in all its beauties, a rollicking romping boy without a care to trouble or restrain him. How

well do I recall the time when but a babe, comparatively speaking, I delighted in gathering the beautiful flowers, in such beautiful shapes, and painted such exquisite colors by an allwise Creator and how in after years as soon as old enough to ramble to the woodland and watch and study His animated creatures, especially the beautiful birds. Ah yes; those were happy days. Time may erase many pleasant instances which have happened since, but while life and reason continue those beautiful memories can never be forgotten. When ten years of age (Nov. 1854) I moved from old Vermont, the land of my nativity. to Kingston, Wis. where I met a kindred spirit in Andrew Alverson, a fine boy and a *Genuine* Naturalist, who was deeply interested in birds; but whose greatest possession at that time was his faithful dog Ring; half Shepherd and half Water-Spaniel. Talk of intelligence in animals, I really think she far excelled anything I have ever met, for she would hunt anything from mice to badgers in the animal line and all kinds of birds and their nests upon the ground and even the fish in the water. To illustrate, we were out hunting one day and on coming to a stream a big, black bass, weighing some three and one-half to four pounds made an attempt to cross a small ripple in the stream, and in less time than I can write it Ring plunged in and brought Mr. Bass out although the thorns upon its back lascerated her mouth so that it bled. My friend lived on a farm only eighty rods from my own home, and one-half mile from his home was the edge of what was known as "the Big Marsh" situated in Marquette Co. (now Green Lake) between the towns of Marquette and Kingston. As I remember it, the marsh was from one-half to two miles wide in places, by some fifteen miles long, and supposed by many to have been a big lake at one time, for there are localities where you could teeter the sod for several rods around and I have often taken my heel forced it through the sod and when through there seemed to be no bottom for I could run my leg down full length. how much further I am not prepared to say, the quagmire seemed however to be soft mud, not water. This used to be in those days fine hunting grounds for boys like us and many a happy find, through the keen scent of Ring. have I taken here. Meadow Larks, Bobolinks, Rails, Ducks, Marsh-wrens; and once, (Oh! how my heart bounded) a fine set of two eggs of the Sand-hill Crane. While near the marsh were groves and meadows. where we found Killdeers, Plovers, Grass Finches, Woodpeckers, Robins, Blue Jays,

Crows, Owls, Turtle Doves and Pigeons. nesting in considerable numbers. Speaking of the wild Pigeon, Passenger Pigeon, *Ectopistes migratoria* it seems strange that a bird, once so plentiful, should have become so scarce. In those days I have seen the Sun clouded by the flight of millions of them, while later on in nesting time it was far easier to find Pigeon's nests than those of the Mourning Dove. Today eggs are priced by some dealers at $3 per egg, while if as plenty as then I doubt if they would bring more than five cents apiece. I noticed an article sometime since, where the writer claimed they only laid one egg, but I would have to differ with him. I have often found one egg in a nest and also one squab or young bird, but while that is so, yet I have found two in far the greater number of cases. the same as the domestic Pigeon or the Mourning Dove.

Doubtless all my readers have heard of the great (to them incredulous numbers of them that were common in earlier days up to the seventies, of catching them in nets by thousands, of going to their roosts and killing them by the wagon loads and hauling them home to feed their swine. To boys who never saw the sun darkened by their presence for hours at a time, and timber broken down by the vast numbers roosting upon the trees I do not wonder they are surprised, nor would I be surprised to hear them say "Oh! what a whopper", yet I venture to say there are those who will read this article who have seen greater sights than I, but will say that in the spring of 1863 I lived on a farm in Wabasha Co., Minn. In those days broad cast seeders were not common and wheat was nearly all sown by hand and as there was considerable wind at seeding time advantage was always taken of any calm time. One evening it being quite still my Father sowed some three acres of wheat; rising early the next morning he sowed about two acres more and came in to breakfast. I had the chores all done and the team ready to hitch up, as soon as breakfast was over I went to the barn for that purpose. When I saw a sight that I will never forget; a cloud of those Pigeons had settled upon the wheat and like the rolling of a big wave at sea they were passing over the field. As soon as the hindermost ones had picked up the wheat clean they would fly to the front and "down to business" again, in a way that they kept up a constant roll like a wave coming shoreward. I started for them as hard as I could run and scared them off, but in an incredibly short time they were there. and had completely stripped over three acres (about four

and one-half bushels of seed) not a grain of wheat could we find. That Spring they roosted in great numbers on the Zumbro River near the mouth of Indian Creek, and in the morning we would see countless thousands going from and in the afternoon see them returning to their roost.

R. D. Goss,
New Sharon, Ia.

Notes on The Birds of Iowa.

Order PASSERES.

Perching Birds.

Suborder CLAMATORES.

Songless Perching Birds.

Family HIRUNDINIDAE.

Swallows.

BARN SWALLOW.

(Continued from last issue.)

"Many of them prefer to nest under bridges and a team passing over a bridge so tenanted will often be followed for several miles by the swallows which eagerly pursue the small insects about the horses. On June 19, 1890, I took a set of eggs each of which had two or three large blotches of reddish-brown covering nearly the whole surface of the egg" (C. R. Ball, Lyon, Co.) "Rather rare. Nests inside barns and other buildings. Usually attaches nest to side of rafter. Seems to be getting scarcer each year in this section. Season of 1894, first seen April 22, and last Sept. 11." (H. J. Giddings, Jackson Co.) "Abundant summer resident. Builds under bridges, sometimes on the top of horizontal beams and sometimes plastering the nest to the perpendicular side of beam so tightly as almost to defy a knife in its removal. 6-1-1'94, ⅓ Incubation advanced" (J. Eugene Law, Dallas Co.) "Appears at the first of May, and begins at once to build. Is often confused with the former species" (W. A. Bryan, Mahaska Co.) "Abundant in Sioux Co. Common summer resident in Story Co. The nest of this bird is built of a few straws or grass-stems and small lumps of mud, gathered around wells and sloughs. The nest is placed upon barn rafters, partitions, or other buildings. A pair in nesting will frequently start three or more nests close to each other, take turns working at each for a few days, and then selecting one in particular they will finish it, lining it with soft feathers and rear their young.

The Barn Swallow often builds upon the rafters beneath bridges that are constantly travelled over the nest frequently being directly over the water. After the second

brood is hatched, small white lice sometimes appear in large numbers and attack the young Swallows. These attacks are sometimes so severe that the young birds in their misery get out of the nest long before they are able to fly. A person may, in a spirit of kindness, pick up the birds and return them to their nest, but in so doing he will probably transfer a number of the lice to his own person, and then his perdicament is better imagined than described for the lice industriously go to eating wherever they find themselves. Those parasites rarely appear upon the first brood, and never in great numbers. Many of the farmers destroy the nest as soon as the young birds have flown, thus compel the parent birds to build a new nest for each brood.

Another parasite belonging to the Order Hemiptera, Family Acanthidae and being closely related to our own darling bedbug, is sometimes found in old nests but it is of little moment compared to the lice. Barn Swallows have a habit of following nearly every team that leaves the barnyard, darting hither and thither with a speed and grace that is simply marvelous. They sometimes follow teams in this way for considerable distance, probably for no other reason than to capture the many mosquitoes and gnats which gather around the horses." (Wilmon Newell, Hull, Iowa.)

614. Tachycineta bicolor. (Vieill.)

TREE SWALLOW.

White bellied Swallow.

"Have never noted this species except during the spring migration, and then rare. The most were noted in the spring of 1890." (W. A. Bryan, Mahaska Co.) "Not uncommon migrant" (J. Eugene Law, Dallas Co.)

"Arrived at Burlington March 20, 1894. Arrived at Iowa City, April 7, 1894." (Paul Bartsch.)

"Common. First swallows to arrive in spring. Nests in holes in trees and stubs. Have never found nest except near water.

Breeds plentifully along the sloughs and lakes bordering the Mississippi River. First seen in 1894, April 14. Last seen Sept. 20." (H. J. Giddings. Jackson Co.)

616. Clivicola riparia. (Linn.)

BANK SWALLOW.

Sand Martin.

"Fairly common summer resident coming to us about May 1 st., and soon after enters upon its nidification. The holes are located in the soft clayey banks of streams, above high water mark and vary in length from 8 in. to 2 feet. They are often constricted a short distance from the further end, and then enlarg-

ed into a spherical cavity at the end. In this is placed the soft dry grass and few feathers that serve as a receptacle for the 4 or 5 and rarely 6 white eggs. The birds sleep in the burrows and may be caught in the early morning or during the period of incubation if sufficient care is used in approaching the bank," (Carleton R. Ball, Lyon, Co.) "Common resident in Sioux Co. wherever a bank is found in which it can build. Does not only stay along the river and large creeks but also builds in any suitable bank or in the side of a sand-pit even though the latter may be several miles from any river or large stream." (Wilmon Newell.) "Common. Nests from May 25 th. to June 25 th. Holes generally about 3½ feet deep. 3, 4 or 6 eggs laid on weeds, grass, straws and hair." (W. W. Loomis.) "Arrived at Iowa City May 3, 1894" (Paul Bartsch.) "Have never taken sets of this species though am confident that the species nests in the county. Occasional stragglers are noted each year." (W. A. Bryan Mahaska, Co.) "Abundant summer resident; breeding in colonies along the river bank. May 19, '94, Set 1-6 fresh. May 30, Set 1-6 fresh." (J. Eugene Law, Dallas, Co.) "Abundant. May to September. Nests in holes in banks. Most of them in this section nest in banks of creeks, sometimes the holes are but a foot or two above the water and get swamped in freshets. Present from April 26, to Sept. 19, 1894" (H. J. Gidding, Jackson, Co.)

617. Stelgidopteryx serripennis, (Aud.)

ROUGH-WINGED SWALLOW.

"This species and the Bank Swallow are often confused. The Rough-winged is larger however, has a more labored flight, lacks the pure white of the under parts and the pectoral collar is incomplete and obscured. The hooklets of the wings of the present species are only fully developed in adult rids. The eggs are four to seven in number, pure white, and closely resemble those of the Bank Swallow, but the shells are more tender, and they average a trifle larger; .75 x .53."(*Davie's Nests and Eggs of N. A. Birds.*)

"Arrived at Iowa City April 28, 1894. This bird nests quite commonly in the crevices of the Burlington Bluffs, and is not at all rare in that locality, although it is often very hard to obtain the nest. (Paul Bartsch.) "Have never noted this species." (W. A. Bryan, Mahaska, Co.) "May occur though I am unacquainted with it." (J. E. Law.) "I find the Rough Winged Swallow more common than I had formerly supposed it to be. Here is a "stunner" but a fact. On June 14. '93, I found a nest of a R. W. Swallow about 4 feet in a bank and dug in

to it. I found 12 eggs altogether. One had a hole in it. Four were dried down so that I could not blow them and the remaining seven were fresh. There was no other hole near so am sure there was only one pair of birds at the nest. I have never been able to account for this." (W. W. Loomis.)

"Last July while spending a few weeks camping on the banks of a beautiful creek bordered on either side by a band of timber, traversing the prairie of Ill. I had an elegant opportunity to observe a few habits of these birds.

Although early in the season thousands of Barn, Eave, Bank, Rough Winged, and White bellied Swallows had gathered here prior to their exit. The low, marshy ground on the one side and the broad expansive prairie on the other furnished plenty of food since they were swarming with insect life. Here one could compare their flight, grace and beauty. I believe the Barn Swallow as it easily and gracefully skims over the ground excites profound admiration, although the White bellied deserves equal rank. One scene shall always be remembered it was on the evening of the 19 th. of July, 1894. I was following a little rivulet through the swampy portion in search of Rails, when suddenly I came to a spring which proved its source. Here was a small lake some 20 feet in diameter; clear, cool and sparkling free from all aquatic vegetation which covered the adjoining lakes, bounded all around by the high prairies. This was the swallow's "Long Branch" dozens at a time pitch into its limpid waters, shake themselves and glide on returning again and again to renew the manuever. The air was full of them and most strikingly beautiful appeared the White bellied as it would dip its white breast and pass on. These, although not in so great numbers as the others, make themselves very conspicuous by their contrasting colors and beautiful flight. At dark they perch on the Iron weed, in the prairie bounding the swamp. Five to ten on a single reed, almost bending it to the ground. Here they were re-enforced daily until August 10, '94. when they all vanished, that night as if by magic." (Paul Bartsch.)

Family AMPELIDÆ.

618. Ampelis garrulus. (Linn.)

BOHEMIAN WAXWING.

"The Bohemian Waxwing is a wanderer and rare in Boone Co., leading as its name implies a Bohemian life, wandering like the Gypsies from place to place attracting the attention of the people who ordinarily do not notice our useful and more plainly colored birds. Perhaps the Creator has given these lovely

birds their roving disposition for a purpose to awaken in man a desire to know who these handsome strangers are (with crested head and curious flattened appendages the color of bright red sealing wax, on wings and tail) finding the life and habits of these birds interesting, it will create a desire to know more of our birds; tell me fellow Students, what is there that can make your heart more glad than a ramble through the woods, and o'er the fields studying the birds you love so well in their favorite haunts.

Coues, truly says of nature, "That Fairer mistress never swayed the heart of man." (C. F. Henning.) "This species has never been taken by me, though I have accounts of it being taken in Mahaska Co. A specimen is in the College Museum at Ames, from Story Co."(W. A. Bryan.)

"Very rare winter visitant in Jackson Co. Have seen none for several years. Formerly used to see a few nearly every winter," (H. J. Giddings.) "A specimen, the only one seen in thirty years observation, and the first I know of being taken in Van Buren Co., was taken by me March 16, 1892. It was feeding on some cedars with a flock of Cedar birds."(Wm. Savage.) "These birds have been taken at Iowa City at different times, but have failed to put in an appearance the past two winters. I have never heard of their capture at Burlington." (Paul Bartsch.) "I have never met it in Dallas Co."(J. E. L.)

619. Ampelis cedrorum. (Vieill.)

CEDAR WAXWING.

"I have at times found these birds quite common at Burlington and have also collected their eggs. On May 26, 1888 I found a nest with one egg. Not recognizing this and not seeing the owner I decided to wait for her appearance. This was not very long, for a flock of Waxwings soon made their appearance. One seperating from the flock flew to the nest and deposited egg No. 2, then rejoined the flock and left with them. This nest and the second that I found were located in a crotch of an apple tree. All the rest were taken in willows bordering the Mississippi. The nest, in every case, was quite bulky, composed of twigs, and lined with wool and cotton from cotton-wood trees. The eggs were always four.

The food of these birds during the winter consists of apples, and the berries of the black gum, mountain ash and cedar. While caged they prefer chopped apples to anything else. They are a very sociable bird, and not of a quarrelsome disposition, as I have seen as many as seven perched side by side on one little limb."

(Paul Bartsch.) "Common throughout the year in Jackson county, and a few breed here. Found a nest, in a small oak 8 ft. up, in first week in August 1891, containing two young birds. This bird is very irregular in its movements, sometimes appearing in considerable numbers and at other times not one can be found. And this at any time of the year. Last fall they were very abundant until winter set in, since which time very few have been seen up to the present." (H. J. Giddings.) "Common summer resident in VanBuren Co. In winter can be seen nearly every day, in the neighborhood of cedars. The first to find the ripe fruits of all kinds. Have never found its nest but have seen young." (Wm. Savage.)

"It is a fine morning in June; the Brown Thrashers ever charming and joyous notes come from among the willows and the hedge; from the maple groves, cool and shady retreat, comes the clear notes of the Baltimore Oriole, the tiny Wrens are at their best this morning. Look! There ahead of us among the cherry trees is a flock of the Cedar birds; watch them as they fly to the next tree with a regularity of movement that reminds one of our boys in blue. How graceful they are going from one fine cluster of cherries to another, why not let them eat a few delicious cherries, they certainly taste better than canker worms. The Cedar bird is common in this locality, visiting Boone Co. nearly every year, and sometimes remain to breed, but their migrating movements cannot be traced with accuracy; hundreds, yes thousands migrating to the south and at the same time many remain with us in their northern home, wandering from place to place in search of food. During the spring migration they usually arrive in Boone Co. the latter part of February. On Feb. 11, '94, a flock of 50 Waxwings appeared at Ames Iowa, they were again seen March 4th. at my friend Weidman's home at Ames. One specimen collected, out of a flock of 25, the secondaries had red sealing wax appendages seven on each wing. March 11th. they were next seen at the same place.

Mr. Weidman says he did not observe them at Ames on any other occasion than the date above given. On March 8th, they were at Boone, then left and returned on the 22nd. In '91 I did not observe the Cedar bird until the Liver Wort and Wake Robin flowers had made their appearance April 5, and 14, were the dates on which I saw them. I collected one of the twenty odd wanderers on the latter date; no appendages on secondaries; the crested beauties were feeding on Cedar berries.

Although arriving later than

usual this year, they remained all summer and on the fifteenth day of June one of my friends found a nest with three eggs and donated it to my collection; this is I believe the only record of its nesting in Boone Co. This same year while camping at Lake Minnetonka Minnesota, I found a Cedar bird's nest built in a small sappling on the banks of the Minnesota River: the nest only contained one egg July 17, (two days later than the set taken by my friend at my home) not having the time to again return to the nesting paradise along the banks of the Minnesota River, I left the nest and egg for a more fortunate Oologist. The only record I can find for '92 is Feb. 20.

In 1889 two Cedar birds were sent to me for my collection from Carroll, Iowa." (Carl Fitz Henning.)

This is a very beautiful bird appearing about the 15 th. of February in our county, in flocks, ranging from a dozen to thirty.

They feed on the red Cedar berries, and are quite friendly. Have no authentic account of it nesting in Mahaska Co. (W. A. Bryan.)

BLUEBIRDS.

It has been stated that the number of Bluebirds returning from the south this year is unusually small. In order to ascertain the cause of this great loss, a letter was sent to Mr. R. Ridgway, curator in the Department of Birds, Smithsonian Institution, Washington, asking what had become of the Bluebirds. Mr. Ridgway is not only scientifically interested, but he has a warm humane regard for all bird-life. He has sent us the following letter, with a pathetic description of the sufferings and death of our beautiful songsters:—

It affords me pleasure to answer the questions concerning the destruction of Bluebirds for the market in Washington and by the so called "blizzard" of February last. Regarding the killing of Bluebirds for the market I have no reason to believe the practice has been discontinued. As many as two or three hundred have been seen at one time in the game-stalls, though not publicly exposed. In fact, being carefully plucked, the species could not be identified except by a person very familiar with birds.

The past winter was one of wide-spread disaster to bird-life, particularly to those kinds whose food consisted in large part of insects and small fruits or berries. The insect-eating species were, of course, deprived of their food supply by the direct destruction of the latter. The berry-eaters, on the other hand, were deprived of their food by the heavy snow-fall

which covered it. Such at least was the case with the Bluebirds in this vicinity. The Bluebird wintered about Washington in larger numbers than I ever knew it to before, no less than twenty-one individuals making their headquarters on my little half-acre in the suburbs, doubtless because of the shelter afforded by an eight-roomed bird-house; also, on account of a supply of berries produced by the hedge of Japan honeysuckle which partly enclosed the place. Just before the blizzard of February 7 to 9 (inclusive) the supply of these berries was exhausted. February 10, I picked up from the snow in my yard seven dead Bluebirds, which had evidently died of starvation their stomachs being completely empty and their bodies greatly emaciated. Not a living Bluebird has been either seen or heard by me in that section of the district since that time, though I have been told of a very few being seen by persons living farther from the City. During the latter part of February or the early part of March, while I was absent in Florida, the English sparrows took possesion of my bird-house, and, in order to make room for their nests, were obliged to remove the dead Bluebirds which were inside. They actually dragged out nine, dropping them to the ground beneath. On April 2, observing that the sparrows were building in the box, and being sure there were no Bluebirds about, I cut down the pole.

Examining the box I found two of the compartments occupied by sparrows' nests, and from three of the remaining extracted five more dead Bluebirds, one hole containing three. Thus, in all, twenty-one Bluebirds died from starvation on my place alone; and I have no doubt that the destruction of this species has been very great throughout the region affected by the great storm, or, at least, where the snowfall was so great as to cover the greater part of their food supply.

Farther South, where there was less snow and a greater abundance of berries the Bluebird escaped.

I found them very abundant in Florida, although swallows and other essentially insectivorous birds had died of starvation in great numbers. I am satisfied however that the Bluebirds there observed are residents (they were evidently nesting, or about to do so); and, consequently we cannot have our Northern stock replenished from that source. There are, however, a few left throughout the Middle States; and therefore unless these few survivors perish before they have a chance to breed, we may reasonably expect an increase which will in due time restore the species to its normal numbers. —*Christain Register.*

THE IOWA ORNITHOLOGICAL ASSOCIATION.

President, Chas. R. Keyes, Mt. Vernon.
Vice-Pres., R. M. Anderson, Forest City.
Secretary, J. Eugene Law, Perry.
Editor-Treas. David L. Savage, Salem.

Report of the Secretary of the Iowa Ornithological Association for the year ending June 15, 1895.

The growth of our Association has been steady, though not rapid.

With the close of the year our roll shows a membership of 36 Active, 8 Associate, and 2 Honorary members.

The revised constitution (as published in April I. O.) has been accepted for the I. O. A. Each quarter we have taken up certain families for special study, and the notes the members sent in were published in the Iowa Ornithologist. I think that the work done in this line has been very commendable. Now, as we enter the second year, that our success may be assured

"Let us then be up and doing
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait."

Yours in the work.
DAVID L. SAVAGE.

ELECTION OF OFFICERS.

JUNE, 1895.

Of the 36 members entitled to vote only 16 sent in their ballots.

FOR PRESIDENT.

Chas. R. Keyes,	9
Ernest Irons.	6

VICE PRESIDENT.

Rudolph M. Anderson.	9
Carl Fritz Henning,	6

SECRETARY.

J. Eugene Law.	9
W. W. Loomis.	6

EDITOR-TREASURER.

E. B. Webster.	1
David L. Savage.	15

EXECUTIVE COUNCIL.

Carleton R. Ball.	9
Wm. A. Bryan.	9
Wilmon Newell.	5
John V. Crone.	10
H. J. Giddings.	8
F. H. Shoemaker,	7

Mr. David L. Savage, who had the election in charge, forwarded to me each original cast. I find his figures correct.

Signed:— CHAS. R. KEYES.

THE IOWA ORNITHOLOGIST,

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Devoted to the Study of
Ornithology and Oology.

DAVID L. SAVAGE.
EDITOR AND PUBLISHER.

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Salem, Iowa.

IN CHURCH.

Just in front of my pew sits a maiden—
A little brown wing on her hat,
With its touches of tropical azure,
And sheen of the sun upon that.
Through the bloom-colored pane shines a glory
By which the vast shadows are stirred.
But I pine for the spirit of splendor
That painted the wing of the bird.

The organ rolls down its grand anthem;
With the soul of a song it is blent;
But for me, I am sick for the singing
Of one little song that is spent.
The voice of the curate is gentle;
"No sparrow shall fall to the ground;"
But the poor broken wing on the bonnet
Is mocking the merciful sound.
—Selected.

The notes on *Vireonidae and Laniidae* were not published in this issue, as not enough of the members sent in their notes on those families to warrant their publication. Let us make a special study of these two families the present year, as the various species are very easily confused; and at the end of the year we will call for a report of each members observations, and shall expect a very complete report.

Mr. R. Ridgway of, Smithsonian Institute, Washington, D. C. writes that "The Bluebird is not regularly migratory south of about the 40th. parallel and frequently remain during the winter—severe ones not excepted—both here and in localities of corresponding latitude in the Mississippi Valley. I have never known it to be so numerous here *at any season* as during last winter prior to the great storm."

We will be glad to meet any of the fraternity at the First Annual Congress of the I. O. A. to be held at Iowa City, Iowa. August 22, 23 ,'95. The Congress will be held in the Zoological Lecture Room of the State University. Come and you will be made welcome.

I will state here that it is very important that *every* member of I. O. A. should attend the First Annual Congress of the association, which will be held at Iowa City, August 22,–23. 1895. in the Zoological Lecture Room of the State University; as it will be of the greatest of value for us to be personally acquainted with our co-workers; also there is some important business to attend to, hence we need a full attendance Let each one of us strive to be present.

NOTES AND NEWS.

The seventeen year Cicadas are enjoying the resurrection of life, this summer. Have you heard 'em?

E. B. Webster has some of the finest photos of birds, we have ever seen. We recommend them to anyone desiring anything in this line.

First annual congress of I. O. A. will be held at Iowa City, Iowa on August 22—23. Be sure and make arrangments to be present.

Fred W. Stack, of Poughkeepsie, N. Y, keeps on hands a large collection of instruments and supplies for the Naturalist; birds-eggs, etc. It would pay you to send for his catalogue. See ad. on first inside cover page.

Walter G. Savage, of Hillsboro, Ia., feels proud over securing a female specimen of Gray Star Buzzard, on May 25, 1895, in Van Buren Co. Ia., near his home.

The Naturalist and Collector of which No. 1 appeared in June, is the latest aspirant for success. This number is very interesting and contains much valuable information. It is published at Abington, Illinois, by Shoop Publishing Co.

Mr. and Mrs. Fred R. Stearns, of Sac City, Iowa, are rejoicing over the advent of a *young naturalist* in their home on June 6 th. 1895.

A late and highly prized addition to my private Collection—is a tanned Rattle Snake skin; 6 feet in length, with thirteen rattles and a button. Captured at Enterprise, Florida, in a cabbage patch. Donated to the C. F. H. by Mrs. Fred L. Paine of this city.

—Carl Fritz Henning.

The IOWA ORNITHOLOGIST is pleased to note the marriage of Mr. Russell E. Bartlett of Rockford, Ill. to Miss Lucile Peck; which happy event was consumated in Kalamazoo, Michigan, the evening of May 23. Mr. Bartlett is well known to the col-

lecting world, having been an enthusiastic collector of and dealer in Natural History specimens for the past 15 years. Mr. Bartlett is editor and publisher of the *Farmers Monthly* a successful agricultural journal, of large circulation and influence.

W. W. Searles, Lime Springs, Iowa, writes; While fishing the other day I saw a fine specimen of the Swallow-tail Kite but he did not come in range of my shot gun but just far enough away to be healthy for him. It is the first I have seen in this locality for four years. Five years ago I shot a fine specimen and mounted it. In May the spring of '88 for three days they were very abundant, but this was the first time I observed them, since then; however they have been very rare only seen 3 specimens since that date. Two years ago an Albino Robin built its nest just about four rods from my gallery door and within 10 ft. from passers on the side walk, thought I would not disturb him and see if the young would be the same but I moved my gallery and was not able to watch them; he was not all white but marked like the Belted King-fisher. He left us as misteriously as he came. I looked for him back the next spring, but he did'nt come back.

BIRD MIGRATION.

1894—'95 COMPARED.

In studying bird migration this spring in this County (Jackson), as compared with last season, two remarkable features present themselves; first the lateness of the arrival of the early migrants, except Ducks; and second the scarcity of some of our common species. I find that migration commenced about twenty days later in 1895 than in 1894, but afterward gradually caught up and the latter part of the season was in advance. The arrival of species the last few days of April were about the same both years.

I give the dates of the arrival, of a few of our common species, for each year, this will show the comparison at a glance.

	1894	1895
Flicker,	March 2,	March 29
Blue bird,	" 3	" 21
Robin,	" 4	" 21
Meadow Lark,	" 5	" 21
Red-winged Blackbird,	" 6	" 22
Chewink,	" 8	April 5
Song Sparrow,	" 9	March 31
Fox Sparrow,	" 13	" 29
Pewee,	" 17	" 29
Chipping Sparrow	" 18	April 5
Vesper Sparrow,	" 22	" 1
Field Sparrow,	" 23	" 3
Purple Martin.	April 7	" 4
Yellow-bellied Sapsucker,	" 13	" 14

Cowbird,	" 13	"	8
White-throated Sparrow,	" 17	"	28
White-bellied Swallow,	" 14	"	20
Brown Thrush,	" 17	"	21
Whip-poor-will,	" 23	"	24
Bank Swallow,	" 26	"	25
Oven bird.	" 28	"	20
Chimney Swallow,	" 28	"	30
King bird,	" 28	"	29
Rose-breasted Grosbeak,	" 29	"	28
Wood Thrush,	" 30	May	3
Olive-backed Thrush,	May 3	"	4
Cat bird,	April 30	"	4
Indigo bird,	May 3	"	4
Baltimore Oriole,	" 4	"	1
Orchard Oriole.	" 5	"	4
Red-eyed Vireo,	" 6	"	3
Scarlet Tanger	" 8	"	1
Redstart,	" 8	"	4
Tennessee Warbler,	10	"	3
Chestnut sided Warbler,	" 10	"	3
Yellow-breasted Chat,	12	"	8
Night Hawk,	" 10	"	3
Wood Pewee,	" 14	"	11
Warbling Vireo	" 14	"	11

Of the common species that are scarce this spring the Blue birds are the most noticable, as in fact they may be classed as one of our rare birds. Up to the 19 th. of May, I had only seen four specimens, but on that date I found a nest with four eggs. Something destroyed this set, however, the pair stayed about and now have a set of five eggs in the same nest. It is to be hoped they will not be molested this time, that they may help bring back this species to its former abundance.

Next in scarcity was the Yellow-rumped Warbler; the first one was seen this season May 5th. nineteen days later than last season, and I only noted ten specimens throughout the Spring migration. The Wood Pewee is very scarce this season, though not as scarce as the two former species. They are usually quite abundant.

H. J. GIDDINGS.

A Favorite Place.

In the southern part of Van Buren County. Iowa, is a little patch of about three acres of hazel brush and other undergrowth, on three sides of this brush is considerable timber and on the side is an open field. Nearby is a small creek; thus making a paradise for birds that like such situations. On May 18, 1895, two of my friends and myself had occasion to pass through this thicket. It is perhaps 60 rods long, and in going this distance, through the heart of this paradise, we found;—

Six nests of Yellow-breasted Chat.

Two nests of the Field Sparrow.

One nest of the Brown Thrush, White-eyed Vireo, and Chestnut-sided Warbler. How was this for a short walk?

D. L. S.

THE FIRST

Annual Congress

OF THE

IOWA ORNITHOLOGICAL ASSOCIATION,

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IOWA CITY IOWA.

PROGRAMME. *AUGUST 22—23, 1895.*

Thursday, August 22, Afternoon.
TWO O'CLOCK

BUSINESS SESSION.

President's Address. Reports, Planning of next years work, etc.

Thursday Evening.
8 O'CLOCK.

PUBLIC SESSION.

Invocation.

Address of Welcome.
Prof. Schaeffer. Pres. S. U. I.

Response, Chas. R. Keyes.

Paper, A True Naturalist.
C. R. Ball, Little Rock.

Paper. American Duck Hawk.
Geo. H. Burge. Mt. Vernon.

Paper, The Goatsucker family in Iowa.
R. M. Anderson. Forest City.

Friday, August 23, Morning.
8.30 O CLOCK,

Paper, Birds Extinct in Iowa, and Those Becoming So.
Paul Bartsch, Burlington.

Paper, Bird Laws of Iowa, and Laws That are Needed.
J. H. Brown, Davenport.

Paper, The Cowbird.
F. M. Roberts, Postville.

Papers, The Relation of Birds to Economics.
(1) The Ducks.
H. J. Giddings, Sabula.
(2) American Crow.
Hiram Heaton, Glendale.
(3) The Thrushes.
E. B. Webster, Cresco.

Paper, Protection of Our Birds.
W. W. Loomis, Clermont.

Friday Afternoon,
TWO O'CLOCK.

Paper. Warblers of Iowa.
Morton E. Peck. Mt. Vernon.

Paper, The Prairie Hen.
A. I. Johnson, Des Moines.

Paper. The Ruffed Grouse.
David L. Savage, Salem.

Paper. Sea Birds That Visit Iowa.
F. H. Shoemaker, Hampton.

There will be time for Discussion after each paper. The papers should not be more than 20 minutes long.

My Life History.

The 12 th. of July, 1895, being rather stormy and I had just had a nice young chicken for lunch, after eating a good breakfast of rabbit and ground squirrel; thus having satisfied my appetite, I thought I would try my literary talent and write an article for this magazine on *Accipiter cooperi*, (as the scientific men have termed it) of which I am one of the number. My birth-place was in a white oak tree, 25 ft. above terra firma, the nest of sticks and twigs was not any to large to hold the four young inmates. This home was in southern Iowa, in the County of Henry, I think. Time rolled on; I became a full fledged bird, and had successfully raised two broods, however just as my mate and I had built our third nest and it contained four blue eggs, a young fellow came along; he had with him what he called a collecting can, he saw the nest and at once began climbing the tree (making one almost believe in Darwin's theory, "That men are monkeys with their tails rubbed off,") soon. he was up to the nest and packing our pretty eggs in his collecting can. This occurred the 13th. of May, 1893.

After inquiring who the Egg-hog (as we called him) was, we found that he went by the name of Savage.

Little did I (leaving off *we*, as I have not consulted my wife's opinion) think that he would ever be an Editor of a bird magazine. The last two seasons he did not

find my nest until it contained young birds, and he was not heartless enough to molest them, so we are on better terms now, than we once were.

I have a picture of my humble personage. that was drawn by the hand of one of the genus Homo; it does not resemble me much, as I seldom get into such a dignified position; nevertheless, I will enclose it with this article and if the Editor thinks best he may place it in the magazine.

Next a few words about my ancestors, or rather, what has been written about the species of which I am a specimen. That noted Ornithologist, Alexander Wilson, confused me with my near kin the Sharp-shinned Hawk—the idea I am any amount larger than *Accipiter velox*, if we are dressed nearly alike—but then of course we must not condemn Alexander because he made a little error like that. It was early in the nineteenth century, through the careful observations of William Cooper of New York, that we were found to be a seperate species from *Accipiter velox*, for this reason we are destined to carry the name, Cooper's Hawk, to the grave. The accusation is sometimes brought against me, that I visit the poultry yard and disturb the fowls, the farmers have given me the name Hen Hawk. I do occasionally catch a young chicken, but they are only little fellows that would eat their heads off before they would be large enough for the pot; hence I plead not guilty of any criminal offence. May the readers of this magazine always speak a kind word for me.

ACCIPITER COOPERI.

THE

IOWA ORNITHOLOGIST,

FOR THE

STUDENT OF BIRDS.

"And now, wouldst thou, O man, delight the ear
With earth's delicious sounds, or charm the eye
With beautiful creations? Then pass forth,
And find them midst those many colored birds
That fill the glowing woods".

Volume I.

SALEM, IOWA.
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1895

INDEX TO VOLUME I.

Address, The Opening, Page 22
American Ornithologists' Union, 45
A Favorite Place, 91
A Peculiar Nesting Site, 51
Bird Migration, 90
Bird Migration in the Mississippi Valley 18
Bluebirds, 85
Blue-winged Teal, The 75
Constitution of the I. O. A. 70
General Notes of Interest, 25, 52, 73
In Church, (Poetry) 88
Iowa Ornithological Association, 23, 50, 87
My Life History, 93
Nesting of the Brown Creeper, 29
Notes and News, 89
Notes on the Birds of Iowa,
Family Fringilladae 1
" Mniotiltidae 10
" Tyrannidae 29
" Alaudidae 32
" Icteridae 34
" Corvidae 55
" Tanagridae 63
" Hirundinidae 64, 79
" Ampelidae 82
Our Boyhood Days, 76
Our Association 53
Pied-billed Grebe, 44
Pine-creeping Warbler, The 47
Program of the First Annual Congress of I. O. A. 92
Woodcock, The American 28
Warbler, The Hooded 28, 67
Work, Our Special 21

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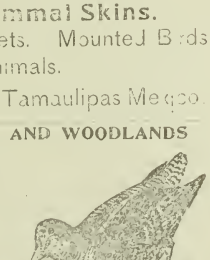

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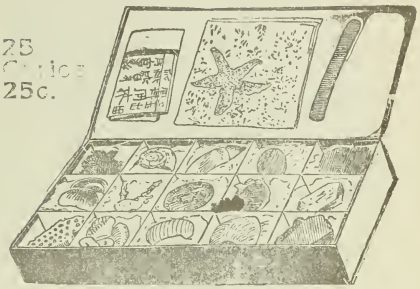

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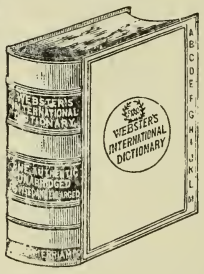

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October, 1895

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TABLE OF CONTENTS

Birds Extinct in Iowa and Those Becoming So, Paul Bartsch, 1

Bird Laws of Iowa and Laws that are Needed, J. H. Brown, 3

The Duck Hawk, Geo. H. Burge, - - - - - 14

Dick, E. B. Webster, - - - - - - - - 19

God's Wisdom in Concealing, - - - - - - 20

A Word From the Editor, - - - - - - 22

What You Missed by Not Attending the Congress at Iowa City, 22

Vireonidæ; Subject for Special Study, - - - - 23

The Downy Woodpecker, Ed. S. Currier, - - - - 23

First Annual Congress of the I. O. A., J. Eugene Law, Sec'y, 23

Constitution and By-laws of the I. O. A., - - - 26

Members of the I. O. A., October, 1895, - - - - 29

Exchange Department, - - - - - - 30

THE IOWA ORNITHOLOGIST

FOR JANUARY

This number will open with a full page illustration of the Pin-tail Duck, accompanied by the paper,

"SEA BIRDS THAT VISIT IOWA"

which was read before the First Congress of I. O. A. by Frank H. Shoemaker.

As quite a number of our readers are Teachers, for their special benefit we will have the article,

Encouragement of Nature Study, i. e., Ornithology, in the High School,

by Prof. Chas. A. Schaeffer, President of the State University.

The NOTES ON THE BIRDS OF IOWA will be continued, the family Vireonidæ is the chosen one, and Mr. John V. Crone will compile the notes that the members of I. O. A. send in. Undoubtedly these notes will be the most complete that have been published.

Mr. W. W. Loomis in his paper

The Protection of Our Birds,

will give some very interesting and instructive ideas. In addition to the attractive features, already mentioned, there will be two pages devoted to Ornithological News and review of Recent Publications.

The Iowa Ornithologist

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Birds Extinct in Iowa and Those Becoming So.

PAUL BARTSCH.

Paper read before the First Congress of I. O. A.

THE above subject presents consummate interest, not alone to the specialist, but to the general public, which in this state has enjoyed that liberal education which gives them an acquaintance of the theme in a general sense, if not in a scientific one.

Before entering upon the details and habits of the specimens which have become extinct, and such birds which soon will be seen no more traveling through the blue sky, over the blooming prairies, and the green woods that skirt our beautiful rivers, it will be necessary to take a retrospect of fifty years ago.

If one has been an ardent reader of Cooper, and knows with what grace, beauty, and splendid imagination he turns over fifty years of the history of the scenic beauty of this country, he may be able to picture for himself what the surface of Iowa was then like. The Western Prairies were studded with lakes whose edges were surrounded by long green sedges. The rolling hills were covered with waving grass and blossoming flowers. In the lower sections majestic elms and oaks raised their crowns to the sky and spread their branches to equal the length of their stem. In this canopy of green the smaller birds found their home, and if a sycamore had outgrown by many feet its pleasant neighbors, the hawks and not unfrequently the eagle chose it for their domicile.

Let us see then how it stood with one of our beautiful birds that has disappeared. The thinner timber that skirted the magnificent woods consisted chiefly of birch and scrub oak. In early spring "the bright sun was darkened in its course," and the frightened novice casting his eyes upward beheld such a sight as has never been equaled in the history of our avi-fauna. This bird of passage with its emblem of peace sallied forth from its southern home to nest in the bounding woods spoken of before. Its long wings fanned the air with incredible speed for hundreds of miles, rarely taking rest until they had taken up those grounds where

mating and nidification took place. Then everything was alive with our Pigeon of the past, now they are seldom seen and are not known to nest in our state. The last of these beautiful birds that I remember seeing was a small flock of about twenty that passed over while we were taking one of those delightful trips in a skiff down the Mississippi between Burlington and Dallas in the fall of '91.

Another bird that has entirely disappeared is the Carolina Parrakeet. This sociable bird, always gathered in flocks, would range as far north as Spirit Lake, where it would frequently remain until the cold snows and stormy blizzards from the north would drive it southward. It is said to have been not an unfrequent bird in the state. Its food in winter consisted chiefly of the seed of the Cocklebur, but it most loved the juice of young corn and would do great destruction to this fruit, and this was one of the causes of its extermination. Its nature was so peculiar that where one of its number was killed or wounded, the others would gather around it with shrill cries and in this way the entire flock could easily be annihilated. The last of these flocks was presented to the State University of Iowa and has since been mounted by Mr. Ridgeway in a beautiful snow scene.

We must now come before the public of Iowa, as a moralist and lecturer, in a sense so far as the protection of those specimens is concerned that are fast disappearing and others which are likely to. There is an inherent selfishness in man, that crops out nowhere stronger than in the little word "possession." If the tendency of those, who have the knowledge of the worth of some of our birds, not only as their usefulness in a general sense is concerned, but their intrinsic value, and would do that in their power and deny themselves the little gain to be derived therefrom, exerting all their influence to protect instead of destroying, we should soon have plenty where we now have scarcity. We know from experience that it is hard to let a valuable specimen escape, yet we have done so when it was in the interest of non-extermination. However, the scientist is not the one that does this great damage, but the small dealer, the collector who rejects every idea except gain. We see this mostly when a hunter goes out and brings such a bird as the Whooping Crane to

mount. To him the beauty and the worth are lost, he knows that he has killed something that is rare and for that reason alone does he hoard it like a chunk of gold.

Let us take the Whooping Crane. Some forty years ago, an old resident of Burlington tells me, he observed that the Flint river mud flats were frequently visited by this bird. Always appearing in small flocks, there they fed and stayed for some time, possibly during migration. They probably nested here also quite frequently. Now such a thing as a nest is a scarcity.

The Sandhill Crane, although much more plentiful, will soon pass away. It is a large bird and the hunter uses it as a convenient mark, to kill it, to throw it away, and have it rot on some forgotten island.

The Egrets, Swans, Mississippi and Swallow-tailed Kites were formerly seen in large numbers; now a single specimen is hardly to be found in our state.

The Wild Turkey is another bird that has seen its best days. Two years ago a Burlington game dealer discovered a flock; he did not shoot with the chances of killing one or two, but observed closely the ground they used, where he built a secure hide. On a rainy day he occupied the same and at the first appearance of the flock scattered it. When all were well separated he used his call and gun so successfully that not one of the thirteen birds escaped.

The little Blue bird, the harbinger of spring, was observed this year in such solitary number that we may safely come to the conclusion that it will be seen no more in a few years, unless we induce the small boy to leave alone its nest.

We must come to the conclusion of the paper, and with it to the conclusion that laws should be framed that would adequately protect our present birds, and knowing that Mr. Brown will ably handle this subject, I leave this to his judgment and experience.

Bird Laws of Iowa and Laws that Are Needed.

J. H. BROWN.

Paper read before the First Congress of I. O. A.

SECTION 4063 of the State Code as now amended by the 22d General Assembly, reads:

"If any person kill, trap, ensnare, or in any manner destroy any of the birds of this State, ex-

cepting birds of prey, the migratory aquatic birds, English sparrow, and those which are useful for food and the killing of which at certain seasons of the year is now permitted by law, or in any manner destroy the eggs of such birds as are hereby intended to be protected from destruction, he shall be deemed guilty of a misdemeanor, and on conviction thereof, shall be fined not less than five nor more than twenty-five dollars.

But persons killing birds for scientific purposes, or for preservation in museums and cabinets, shall be exempt from the penalties of this section, upon making satisfactory proof of the purpose for which they have killed any such bird or birds."

In the above section we notice a number of exceptions, the first of which is birds of prey. This exception is too broad, to my notion, and the exceptions should be specific and on only those species of raptories which the researches of our government and ornithologists in general have proven to subsist mostly on poultry, game, and small birds and not to apply to those species which do immeasurable good in the capture of small rodents and insects, and a clause should be embodied giving permission to shoot any and all species of raptories, or members of the family corvidæ, which are found in the act of depredating the poultry yard, or game covert, or of destroying the eggs or young of our native birds.

"Migratory or acquatic birds," as used in the above section, is one of the many indefinite terms in use among our legislators. If this term is meant to apply to rails, snipe, curlews, etc., it would equally well apply to herons, bitterns, terns, gulls, etc., and we would find all of these unprotected.

If, on the other hand, it is meant to apply only to ducks, geese, etc., a very improbable surmise, we find in this case that the shooting of snipe, rail, etc., is at all times illegal and that the law is being constantly broken.

Our gulls and terns do an immeasurable good in the myriads of insects they destroy and should be rigidly protected, as should be the snipe, curlews, and rails, during the spring and summer months, and these last should be shot only during a regular open season, as are our other game birds. The English Sparrow is the only bird specifically designated as without protection, but to

this should be added at least three birds, besides the injurious raptores and corvidæ, the Cowbird (Molothrus ater), the Kingfisher (Ceryle alcyon), and especially that renegade among birds, the Blue Jay (Cyanocitta cristata), and such others of the corvidæ as a study of bird life and economics will prove to be of more injury than benefit to man. In this code, too, no provision is made for an open season on the Mourning or Turtle Dove (Zenaidura macroura), and this bird should, I think, be included among our game birds and a short open season established in which it could be legally shot. As it now stands, there are thousands shot annually in our state and all illegally.

The last clause in regard to collecting for scientific purposes should be modified to legalize the taking of nests and eggs on the same conditions as taking birds.

In the laws enacted by the 22d General Assembly, Chapter 103, Section 1, we read:

"That it shall be the duty of every peace officer who may have knowledge of any violation of the provisions of section 4063 of the Code, to immediately file information, against the person so violating said provisions, before some justice of the peace having jurisdiction of said offense and to cause the arrest of such person and to immediately give the county attorney all information within his knowledge concerning such violation."

This section needs no comment except to suggest that the peace officers are not competent in themselves to secure a rigid enforcement of the laws, and to secure this a game warden and at least two assistants are necessary and these should receive a salary instead of a part of the fines imposed, as is customary in the states having game wardens, and it should be the duty of these officers to cause the arrest and punishment of all offenders against the game laws.

In the same chapter, Section 2, are the following provisions for neglect of duty.

"Any peace officer who may have knowledge of any violation of the provisions of said section 4063 and shall fail and neglect to perform his duty as herein specified shall be deemed guilty of a misdemeanor and on conviction thereof shall be fined not less than two, nor more than ten dollars."

An officer of the law who is guilty of neglect of duty is guilty

of more than a misdemeanor and should be fined not less than one hundred dollars for the first offense and a forfeiture of office and imprisonment for the second. This may seem like harsh measures, but they are needed and would be enforced if an officer was guilty of any other neglect of duty than a neglect to punish offenders against the game laws.

In Chapter 156 of the laws of the 17th General Assembly, Section 2, is provided the open season in which it is lawful to shoot certain birds.

"It shall be unlawful for any person within this state to shoot or kill any Pinnated Grouse or Prairie Chicken between the first day of December and the first day of September next following; any Woodcock between the first day of January and the tenth day of July; any Ruffed Grouse or Pheasant, Wild Turkey, or Quail, between the first day of January and the first of October; any wild duck, goose, or brant, between the first day of May and the fifteenth day of August, or any wild deer, elk or fawn, between the first day of January and the first day of September.

To my idea these seasons are not the best adapted to preserve our game. The season on Quail should close December 1st instead of January 1st and thus in a great measure protect them from the pot hunter who takes occasion while they are clustered together in the snow to kill a covey at a shot. Wild Turkeys should be protected for a period of at least five years, but even this I fear would not prevent the gradual extermination of this grand bird and also of the Ruffed Grouse from our state, for there is another factor at work in the extermination of these two birds which does more in this way than all the sportsmen and even the pot hunters of our state can do.

I refer to the rapid diminution of our forest area. Our state is a prairie state and yet there were formerly along all our water courses forests of no mean size and these were teaming with bird life that is now fast reaching extinction as far as our state is concerned. Here in former years the Pileated Woodpecker, the Grouse, Turkey and Pigeons abounded; now one may tramp for miles through the remnant of these grand woods and rarely see any of these once abundant birds. How many times have we, when the first warm days of spring came around, started out for some familiar wooded spot where

many quiet hours had been spent the year before, only to find the hills bare, with here and there, among the unsightly stumps, piles of corded wood. The land in many of these spots is practically valueless, yet for the few dollars the wood will bring the farmer will cut down the last vestige of these noble woods and then wonder why, in place of the evenly distributed and apportioned rainfall of former years, we now have months of drought. There is much room for education in these matters and to our agricultural and district schools we must entrust this branch of education. How eagerly will all nature loving people second Prof. McBride's able suggestions towards the formation of large county parks where we may always find nature to a great measure undisturbed.

To return to our text—we find it is lawful to shoot Woodcock on July tenth. To the true sportsman nothing affords more pleasure than a day among these noble game birds and when the birds are strong and active it is truly grand sport, but in midsummer when the river bottoms are steaming and the whole air is heavy and drowsy and the birds flush lazily and fly slowly the sport is gone, and for my part I should like to see the Woodcock season open September 1st instead of July 1st.

September 1st, or better September 15th, should be the opening date for our duck and geese shooting. With us in the southern part of the state there is practically no shooting before this date, but in the lake region the young ducks are an easy mark in August.

Then, too, spring shooting of every kind should be abolished. The spring shooting on ducks and geese does more harm in one season than fall shooting for years. I shot ducks last spring which were so poor they were of no use for food and even later in the year they were not the strong active birds that make fall shooting so enjoyable.

Section 3 of this chapter puts a restriction on the number and the purpose for which birds are killed.

"It shall be unlawful for any person, at any time, or at any place within this state, to shoot or kill for traffic any Pinnated Grouse or Prairie Chicken, Woodcock, Quail, Ruffed Grouse or Pheasant; or for any one person to shoot or kill during any one day, more than twenty-five of

either kind of said named birds; or for any person, firm or corporation to have more than twenty-five of either kind of said named birds in his or their possession at any one time, unless lawfully received for transportation; or to catch or take, or attempt to catch or take, with any trap, snare or net, any of the birds or animals named in Section 2 of this act, or in any manner willfully to destroy the eggs or nests of any of the birds hereby intended to be protected from destruction."

This section needs nothing but enforcement to make it all that can be desired. It is this killing for traffic that is depopulating our prairies and marshes. These refrigerators where game is stored for years are what tempt men to shoot and trap in violation of existing laws, for without these there would be no profit in shooting birds for an overstocked market, as there always is during the open season. The closing of the large refrigerator in Keuanee, Ill., last July was a step in the right direction, but there are others besides the one which Game Warden Blow has succeeded in prosecuting and which will cost its owner, H. Clay Merritt, his entire fortune to pay the accumulating fines against him.

Section 5 of this chapter provides that it is illegal to handle game in the closed season.

"It shall be unlawful for any person, company, or corporation, to buy or sell, or have in possession, any of the birds or animals named in Section 2 of this act, during the period when the killing of such bird or animal is prohibited by Section 2, except during the first five days of such prohibited period; and the having in possession by any person, company, or corporation, of any such birds or animals during such prohibited period, excepting during the first five days thereof, shall be deemed prima facie evidence of a violation of this act."

This section needs only rigid enforcement and it is not now so much violated as formerly. Several years ago there was some evidence of large "freezers" in northern Iowa, but if such are still in existance the fact is not so generally known and their business will be much restricted after the closing of the large Illinois concern, because of the evident stand taken by the sportsmen of Illinois and a sympathetic movement now being felt among all the sportsmen of the west.

Section 6 reads: "It shall be

lawful for any person to ship to any person within this state, any game birds named in said Section 2, not to exceed one dozen in number in any one day, during the period when, by this act, the killing of such birds is not prohibited; provided, he shall first make an affidavit before some person authorized to administer oaths, that said birds have not been unlawfully killed, bought, sold, or had in possession, are not being shipped for sale or profit, giving the name and post office address of the person to whom shipped, and the number of birds to be shipped. A copy of such affidavit, endorsed, "a true copy of the original," by the person administering the oath, shall be furnished by him to the affiant, who shall deliver the same to the railroad agent or common carrier receiving such birds for transportation, and the same shall operate as a release to such carrier or agent from any liability in the shipment or carrying of such birds. The original affidavit shall be retained by the officer taking the same, and may be used as evidence in any prosecution for the violation of this act. Any person swearing falsely to any material fact of said affidavit, shall be guilty of perjury, and punished accordingly."

Section 7 along the same line reads:

"If any person shall kill, trap, ensnare, buy, sell, ship, or have in possession, take or carry out of the state, contrary to the provisions of this act, any of the birds or animals named in this act, or shall willfully destroy any bird or nests of birds named in this act, he shall be punished by a fine of ten dollars for each bird, mink, otter, or musk rat; twenty five dollars for wild deer, elk or fawn, and ten dollars for each nest or eggs therein, so killed, trapped, ensnared, bought, sold, shipped, had in possession, destroyed, or shipped, taken or carried out of the state, and shall stand committed to the county jail for thirty days unless such fine and costs of prosecution are sooner paid."

The transporting of game out of the state, especially to the Chicago markets, is carried on on a very large scale every spring and fall and could be practically stopped if an example was made of one or two of the express companies doing such business. A rigid enforcement of these sections would do much to protect our birds and their nests, but it

is a demonstrated fact that the people will not inform and to secure a proper enforcement of the law, a game warden is absolutely essential. Section 8 is along the same line and bears especially on the transportation companies and their liabilities before the law.

"If any railway or express company, or any other common carrier, or any of their agents or servants, knowingly receive any of the above mentioned birds or animals for transportation or other purpose, during the periods hereinbefore mentioned, limited and prohibited, or at any other time except in the manner provided in Section 6 of this act, they shall be punished by a fine of not less than one hundred, nor more than three hundred dollars, or by imprisonment in the county jail for thirty days or by both such fine and imprisonment."

This section is openly violated by the express companies operating in this state and if we had a game warden whose duty it was to punish all violators of the game laws, he could not but find easily accessible evidence to convict and a few such convictions would sensibly lessen the illegal traffic in game, now going on.

Section 9 provides for the prevention of wholesale slaughter by the use of the swivel gun.

If any person shall shoot or kill any wild duck, goose, or brant, with any swivel gun, or any kind of gun except such as is commonly shot from the shoulder or shall use medicated or poisoned food to capture or kill any birds in this act, he shall be deemed guilty of a misdemeanor, and upon conviction shall be fined twenty-five dollars for each offense and shall stand committed to the county jail for thirty days, unless such fine and costs of prosecution are sooner paid."

There is very little violation of this law now, though I have seen 8 guage guns used, throwing $1\frac{3}{4}$ oz. of shot and shot and which were nearly as destructive as the old swivel gun.

Sections 10 and 11 are with regard to bringing action for violation of the game laws.

Section 10: "Prosecutions for the violation of this act may be brought either in the county in which the offense was committed, or in any other county where the person, company or corporation complained of has had or has in his or their possession any birds or animals herein named, bought, sold, killed, trapped or ensnared, in violation of any of the provisions of this act."

Section 11: In all prosecutions under this act the court before whom the same is brought shall appoint some attorney-at-law for the purpose of managing the prosecution of the cause and such attorney shall be entitled to a fee of ten dollars in each and every case in which he is so appointed, and the person filing an information under this act, shall in case of conviction, be entitled to a fee equal to one half the amount of the fine imposed on each conviction, and both the fee of such attorney and the informant shall be taxed as costs in the case against the person convicted. Provided, that the county shall in no case be held liable for such attorney's fee or penalty.

It seems to me that the prosecution under this act should be conducted by the county, or better yet, the state attorney or assistant, and all such fines, etc., go to defraying the expenses of the game-warden. It stands to reason that an attorney of ability will hardly feel like devoting much thought or trouble to a case in which, no matter how long drawn out or how complicated, his fee is to be only $10. In other breaches of the law the state's attorney is called upon to prosecute, if it be a state law that is broken, and why should he not conduct the prosecution of our game laws?

The twenty-fifth General Assembly passed laws restraining hunters from trespassing upon enclosed lands without permission.

Chapter 64, section 1: "No person shall hunt with dog or gun upon the cultivated or enclosed lands of another, without first obtaining permission from the owner, occupant or agent thereof."

Section 2: "Any person violating the provisions of this act shall be punished by a fine of not more than ten dollars and costs of prosecution and shall stand committed until said fine and costs are paid, for each and every offense, but no prosecution shall be commenced under this act except upon information of the owner, occupant or agent of such cultivated or enclosed lands.

These two sections caused considerable feeling among the sportsmen in the state when first enacted, but they are a needed protection to the farmer against those careless, reckless hunters who shoot without regard to direction or nearness of cattle or stock of any kind, and it has

been my experience that it is not hard to obtain permission to shoot, from most farmers, where they can see that one is careful in regard to shooting in the direction of stock.

In conclusion I must say that great blame for the non-enforcement of our game laws lie with the sportsmen and ornithologists of the state.

They see the laws broken time and again and do not attempt to have the guilty parties punished. The part of informer does not set well on the average person, yet if we are true sportsmen and ornithologists we ought to see our duty and do it, but a game warden would do more of this kind of work in a month than all Iowa will do in a year. Then, too, the laws of the states in regard to our avi-fauna will never be what they should be until the ornithologists interest themselves in the matter.

Let us take up more earnestly the study of economics. It is far more fascinating than the average collector can guess and more of life histories of our birds can be learned in this way than any other. Our association is in a position, better fitted to thoroughly undertake the study of the economical importance of the birds of our state than any other institution of the state, and in this way we can advance the interests of this, the first of all states in agriculture. Our state too, must follow the example of some of the newer states and of the older European countries and pass and enforce forestry laws. Every county in the state should have a certain acreage of timber, and if a law of this kind was enforced by the states in general, we would not have a drouth for three months and then a rainfall of five to ten inches in twenty-four hours and then drought again. Our rivers would more nearly approach what they were forty or fifty years ago and the birds once plentiful would gradually increase and we would again be in tune with nature. Then there is much room for educational work in our branch. The ignorance of our legistators on subjects of this kind is proverbial. The following extract from the laws of one of our far western states will tend to show how deep-seated this ignorance is among our legislative bodies. Section 25: "Every person who shall kill, or destroy, or have in his possession, except for breeding purposes, any nightingale, skylark, black thrush, gray sing-

ing thrush, linnet, goldfinch, greenfinch, chaffinch, bullfinch, red-breasted European robin, black starling, crossbeak, Oregon robin, or meadow lark, or mocking bird," etc., going on to protect a number of European and mythological birds and protecting only five of the native birds of the state excepting the game birds.

This is not by any means more than a fair sample of the ignorance shown by our legislators.

The subject is a large one and many laws should be enacted for the preservation of our birds, yet the most important of all is to secure an enforcement of the laws in force and in the meantime let the educational work go on and if a law is enacted that is what it should be, it must be drafted by a true sportsman-ornithologist who has the best interests of our birds at heart and the education to see what legislation is needed.

A Heronry.

PAUL C. WOODS.

ON June 15th, 1895, I returned home from a year's work at school. The following week I was informed that a number of strange birds had been seen about three miles from the city, and that their nests had been found. The informer claimed that it was the birds' first year here, at least the first they had been seen. I was instantly aroused to action and resolved to explore the place and discover what new species of bird we had. June 25th, a friend and myself started for the place with a horse and buggy. We went along the prairie road for about three miles, then crossed a pasture and tied our horse at the outskirts of a scrub-oak thicket. After following this for a little way, we turned down into a ravine where the trees were larger. Here we got our first sight of the birds. They appeared to be in great numbers and were very shy. The ravine widened at this place and ended at the bank of the river. We followed the river for about forty rods, during which time we saw scarcely a bird. We were beginning to get a little anxious, when suddenly we heard a great fuss and squawking ahead, in an oak thicket, the home of the Black-crowned Night Heron. Not the pretty place that one might imagine, for herons are very dirty and slovenly.

But the nests, I never saw the equal, at every step we would hear a fresh scramble as the birds were frightened off. The

grove must have extended eighty rods, and hardly a tree that did not have one or two nests in it.

The trees were rather small, and as they are inclined to sway and were very scraggly, the nests were somewhat difficult to reach. They were composed of twigs, a trifle larger than I had supposed, being about 18 inches across and 3 or 4 inches deep, and the eggs could not be seen from below. We secured what we desired and left the birds in peace. We did not find more than three eggs in a nest and as several were broken on the ground, we came to the conclusion that it was the work of the Crows, a few of which were around. The eggs are of a light greenish-blue, and although they vary a good deal, average about 1.50 x 2.00 in size. On reaching home we found that a few of the eggs were incubated.

The Duck Hawk.

GEO. H. BURGE.

Paper read before the First Congress of I. O. A.

NO doubt there are but few here who have not read at some time, in some of the numerous books on ornithology, a statement which reads like this: "The Peregrine Falcon, or Duck Hawk, is distributed throughout North America at large, though it can hardly be called a common resident anywhere." The eggs of this hawk are found in but few of the private collections in this country and consequently the average collector is not very familiar with these birds and their habits. It has been my pleasure to collect three sets of eggs of this hawk and to aid in the taking of another. By the request of Pres. Keyes, I will endeavor to give a brief account of this hawk's habits, as I have observed them. and will also give a few of the distinguishing marks, so the bird can be readily identified.

The Falco can be easily distinguished from the rest of the family Falconidæ by the toothed beak, and the Duck Hawk from any other bird in North America by the slaty-plumbeous or lead color of the upper parts, the black "mustache," a patch of black feathers extending in an angle from the corners of the mouth downward, and its large feet, the middle toe being very large. It is a medium sized hawk; Coues gives the average of a female as length 19 inches, tail 7 inches, extent of wing 14.50 inches; the male being smaller.

The breeding range of this hawk includes Canada, Alaska, Greenland and all of the United States with the possible exception of the southern part of our dominion. It is a migrant, being found only during the breeding season in the northern part of its range. In its journey northward it generally follows the river courses or rather the course taken by the ducks in their migration; for they enter largely into its bill of fare.

With the possible exception of the American Gos Hawk, it is the most audacious of our birds of prey. It is regarded with disfavor by hunters and they never lose an opportunity of shooting at it. I say shooting at it; for they don't always kill it when they seem to have an opportunity. There are some reasons for this, which may be briefly stated. It is a compact bird, its flesh being very tough, more so than the proverbial boiled owl. Its flight is so rapid the hunter is apt to shoot behind it, and its tenacity of life being wonderful, unless a wing be broken it will fly as long as life remains in the body, and it has been known to sit on a limb after it was shot through till life was extinct.

This hawk is quite a persistent hunter and moves over a considerable territory in a short space of time. It seldom soars, in fact, I never saw it sailing. It seems to see everything near it when it alights upon a tree, which tree is usually a dead one that commands a view of quite a bit of territory and if it happens to be hungry, woe betide any snipe or bird that comes within its range of vision. I never saw this hawk capture anything larger than a snipe or flicker, though a nephew of mine who has hunted and collected with me since I have been engaged in the pastime (I don't call it a business) has seen this hawk capture a teal duck.

I never saw the hawk when it was devouring its victim, though I have tried to get in sight of it several times. Audubon says it flies with its victim to some convenient spot and alights, turns its prey on its back, and with its beak, plucks the feathers from its breast, then tears out the meat and swallows it, leaving the refuse, but if it is a small bird and the hawk is hungry, it will eat that also. Fish eyes and scales have been found in its stomach which show that these enter into its bill of fare. It is not a fisher and the conclusion was that they were parts of fish

that had died and lodged on the bank.

The spot on the Cedar river, selected by this hawk for a nesting place, is an ideal one, and I will go into detail to describe it. About fifteen miles below Cedar Rapids the Cedar river flows for about two miles between bluffs of lime stone, these bluffs varying in height from twenty to one hundred feet. Just before the bluffs begin there is a broad bottom land along the river, dotted with numerous small ponds, and Big creek and Indian creek enter the river through this bottom. In times gone by, or within the last ten or twelve years, this bottom land was a great feeding ground for ducks during spring and fall migration, and a considerable number nested there. If this hawk selected this nesting place a number of years ago, which I am told was the case, it was an ideal one. I have been told by an old hunter who has lived along the river for about twenty-five years that there has been a pair of these there ever since he has been there.

There is seldom more than one pair of these hawks found in one locality. For a few years before I collected my first set of eggs of this hawk, they had nested and reared their young, and flown away but in the spring but one pair of hawks returned. I never heard these hawks make any noise while they were hunting, but when it returned from hunting, after nesting had begun, it usually lit in a dead tree across the river from the nest and set up a great cackle when it would be joined by its mate. Then they would both get in the tree and utter their peculiar cry for a while, then one would return to the nest and the other would fly off up the river. I sometimes thought it was a different one that returned to the nest, but was not positive. Col. Goss says that as far as noticed the male sits upon the eggs in the fore part of the day and the female in the latter part of the day. The one off duty sometimes feeds the other, but usually sits perched in a tree as a guard. I have noticed that the one off duty puts in the greater share of its time a considerable distance from the nest: have watched for two hours at a time before seeing the other than the one on the nest. Then I would see the other one coming from a distance—always from the direction of the bottom lands before mentioned. It would alight and sit awhile, then fly

away again.

It was quite hard to flush the one sitting, if the other one off the nest was not around, but if it did fly off, it screamed and flew around high in the air and it would not be long till the other one could be seen approaching. Either they have quick ears or keen sight as there would be no bird in sight when it was flushed.

After the young were hatched they were both usually found near the nest when not hunting and if any one approached they set up a great noise and continued it till the disturbers had passed their nest a considerable distance. They are at this time quite bold and could be shot without much difficulty.

These hawks usually arrive here about the middle or last of March and begin nesting about three or four weeks later—there seems to be no fixed time. I took my first set of eggs of this hawk the 28th day of April, 1892. It was a set of four and incubation had begun. The nest was in a hole in the face of the bluff about eighty feet from the water and twenty feet from the top of the bluff. I went down to the nest by means of a rope. There was a very little sand and gravel in the hole and the eggs were laid on it, there being no resemblance to a nest. The second set was of three eggs and was taken on the 27th of May, 1892. It was the same pair of hawks and in the same place as set number 1. When this set was taken the bird did not leave the nest till I was almost down to it, although the other one was screaming around and darting down close to me.

In the year 1893 they made their appearance quite early and their eggs were hatched before I had time to collect any. They nested in the same place that they did in 1892 and reared four young, two of which were shot before they left the nest—the other two flew away some time later and I saw no more of them that year. During the year 1894 I took a set of four eggs on the 20th day of April, or rather it was taken by my nephew, J. Russell Moore, who was with me. In this instance we could not flush the bird by halloing, whistling or throwing stones at the cliff and it did not leave the nest till Mr. Moore had dropped down directly in front of the nest, then he could have caught in his hand but he had had some experience in handling a live hawk bare handed, so he did not attempt

its capture.

These hawks flew around there for a couple of weeks, then it became evident that they were nesting again. We have a friend in Cedar Rapids by the name of Bert Bailey who was very desirous of securing a set of the eggs of this hawk so we invited him down when we thought the set was complete, and he took a set of three which he now has in his collection. This was the second set taken from those birds that season and these eggs were taken from a new nesting site, which was in the same cliff, but about forty feet below the first nest. The hole was about three feet deep, and contained some sandy clay, in which the birds had scratched a slight depression and deposited their eggs.

A pair of hawks, presumably the same, nested at the palisades again this year, but in a new place. I located them in the early part of April in the same cliff they had nested in a year before. There is a lime-kiln in course of construction near the old nesting site and I think the continuous noise there caused them to leave the immediate neighborhood. I did not go to look for them again till about time for them to have a full set of eggs. I went down to the old nest, but it was deserted, and I did not locate them in their new quarter, till the young had just kicked out of the shell—the youngest chick being not quite dry. They had nested about a half mile below the old nesting place on a ledge about fifteen inches square and hid by a bush. The ledge was about twenty feet from the top of the bluff and thirty feet from the water. The young were all killed before they could fly very much, but the old birds escaped and I hope to record at least one set of this hawk's eggs in the year 1896. Yon can see how persistent they are in returning to a favorite nesting place after they are continually robbed.

We can not but admire the swift flight of this hawk. The valiant courage with which he drives away any interloper from his favorite hunting ground; the fortitude and persistence he displays in returning to a favorite nesting place though contnually robbed and harrassed, and particularly the beautiful eggs which add beauty to any collection, but we have no grounds to defend him when judged from an economic standpoint as he is not known to destroy any ro-

dent or bird or snake or lizard, insects or worms, that will make him a benefit to man and I fear he will not be considered a bird that should be protected by law.

Dick.

E. B. WEBSTER.

DICK was a plover, a pet plover, sprightly as a fairy and tame as a kitten. 'Twas the last of July, some ten years ago, that some sharp-eyed boys spied him as he was running about in the meadow searching for his evening meal of fat, juicy worms and dainty bugs. Trusting more in nature's gift of concealment than in his strong wings, he was easily captured and ere long I made his acquaintance.

I have had—we nature-loving people have all had—many pets, eagles, hawks, owls, herons, crows, and numerous smaller birds, as well as a fair variety of mammals, but never had I heard of a tame plover. That a bird so timid, so extremely wary as the plover we hunt in the fall, could become the tamest of pets, seems incredible. And yet in a week he would come at call and eat from my hand.

I took him home, and spreading some paper in a dark corner under a bed, introduced him to his new quarters. Here he spent most of his time, usually standing in a shallow dish of water. But when all was quiet, out he cautiously came, running a few steps at a time, then stopping to listen, when at the slightest sound or movement he would scurry back under the bed. If all continued still, he explored the walls and corners, catching many a fly and stray spider. His feet moved so swiftly, he seemed to glide rather than to run, and almost quicker than the eye could follow he would be at the other side of the room where he had detected a fly on or near the floor.

We fed him some insects, but mostly earth worms, nice long fat ones, a handful at a time. Step in at the front door, call "Dick! Dick!" and in a trice he had run through the intervening rooms and was right at hand. Always hungry, he would eat until his crop was a wriggling round ball and, likely as not, the last worm would only go half way down, even as, with extended neck, he put forth his utmost efforts to swallow it. In fifteen minutes at the most he would be ready for another meal.

The most peculiar thing I observed about his habits was that

when perched on one's hand, he always maintained his head on the same level if possible. Lower the hand, and the neck and legs would gradually lengthen until he stood ten or twelve inches high; raise the hand and they shortened until he was almost a little ball of feathers. Little plover chicks, a few days old, which I have occasionally picked up in Dakota, would not do this.

His musical whistle, never too loud, was given very frequently at times, and certainly was as sweet a note as is ever uttered by any bird.

November approached, and as he would eat no meat, no matter how juicy, or how finely shredded or chopped, and as "anglers" could not be obtained in the winter, we finally took him out on the prairie and gave him his liberty, hoping that in a warmer clime he might live on the fat of the land, and knowing that he had ample reason to be thankful for having so "wormed" himself into the affections of the amateur taxidermist.

The accompanying illustration was taken in a photograph gallery where the large sky-light and and strange faces and surroundings made him more than usually timid and, though his head and breast were slightly out of focus, we were fortunate in doing so well. The picture speaks volumes for his extreme tameness; the dark corners of the room or the bright sky-light above would have been too much for its success had he been even a shade less confiding.

God's Wisdom in Concealing.

THE idea that God displays His wisdom in revealing is a familiar one, but we are less accustomed to think of His wisdom as manifested in what he conceals. Yet, if we reflect upon it, we must see that there is great truth in the proverb, "It is the glory of God to conceal a thing."

We may apply this principle to the method of God in nature. Suppose the secrets of nature had all been revealed to man at the outset. Who can doubt that it would be a great misfortune? One of the greatest powers for the progress of the human race is found in the skill and acumen which the study of nature's secrets has developed. In making enough of nature plain to tempt investigation, and in concealing enough to challenge and train the intellect of man in the search, and to impress the imagination,

the Creator has supplied the strongest incentive to progress, and the most impressive proof of His wisdom. The discovery of what was concealed has a stimulating and elevating effect upon the mind. It is no extravagance, therefore, to say that it would have been a great misfortune to the race had the secrets of nature which science has thus far disclosed, been make plain to men at first. It was better that the world should do without the knowledge of them until by study, by research and experiment, it should discover them, than that it should have had the benefit of them without the stimulus and discipline to be gained only in the search, just as it is better that people should have to work for their bread than that they should get it without work.

In like manner it is better that we get our scientific knowledge by toil and search than to be put in easy possession of it. Hence we can see that in this respect Goc's glory is most manifest in this method of partial concealment, because God is glorified by every means which promotes the true well-being and growth of mankind. Moreover, the concealment which stimulates study and discovery makes nature appear far more impressive to us than it otherwise would. We have only learned enough of nature's secrets to see how wonderful God's work in nature is. That which has been revealed serves to inspire us with greater awe in the presence of what is still veiled in mystery. As when we stand on the sea shore, the expanse of water that the eye can see, makes more impressive the thought of miles and miles of ocean that stretch far beyond our sight, as the little of nature which we have found out makes us feel that we have begun to read the divine thoughts, and how wonderful beyond our present conception must they be?

If by analogy we apply the same principle to the providence of God, we cannot doubt that He is intending yet to show us surprising evidences of His wisdom in the present concealment of His ways and purposes. Since the mystery of nature has not proved to be our misfortune, we may well believe that there lies in the concealments of providence a range of blessings as much higher than the benefits of study and discovery in science as the realm of science is higher than that of matter. Is it not according to analogy, is it not according to experience, to hold that we rise by discipline, by effort, by gradually pressing our way into higher ranges of truth; and by the training of capacity for fuller revelation? If so, then we shall yet see all God's wisdom in the concealments of His providence.—Selected.

The ....

Iowa Ornithologist.

A Quarterly Magazine Devoted to the Study of Ornithology and Oology.

DAVID L. SAVAGE,
EDITOR AND PUBLISHER.

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One year	40 cts.
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1 column	3.00
1 page	5.00

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Address all communications to David L. Savage, Salem, Iowa.

In commencing with this number, the second volume of a magazine for Ornithologists and Oologists, a few words from the editor may be in order.

I desire to extend thanks to the fraternity of the Association for the honor they have bestowed upon me, in electing me as editor for the second year; also to the many readers of this magazine for their kind support, and I trust it will be continued, for they may feel assured that the second volume will be superior to the first.

As the IOWA ORNITHOLOGIST reveals the wonders of nature, may its readers

"Go forth under the open sky,
And list to nature's teachings."

May they, while searching the secrets of nature, be impressed with "the wisdom of God in concealing." For as man searches and discovers the secrets of nature, it strengthens and elevates the mind, it draws him nearer to nature's God, hence in this way the Creator has supplied the strongest incentive to progress.

What You Missed

By not attending the Congress at Iowa City.

Hearing Heaton tell the good and bad qualities of the Crow.

Seeing Keyes, Burge and Peck smile as Mt. Vernon was chosen for 1896.

Hearing Shoemaker's interesting paper on "Sea Birds that Visit Iowa."

Getting the pamphlet, "Game Laws of Iowa" which Brown had for distribution; however, if you will address J. H. Brown, Iowa City, Ia., he will mail you a copy.

Seeing Laws' excitement when he beheld the innumerable birds' skins, of the Talbot collection, in the fourth story of the Science building.

Hearing Loomis' excellent paper on "The Protection of Our Birds."

Seeing the painting of the Ruffed Grouse which Savage had to illustrate his paper.

We have taken the family Vireonidæ for special study this quarter. The notes on the species of this family should be sent to Jno. V. Crone, Ames, Iowa, by December 1st. Let every one of the forty-three active members send in their notes.

The Downy Woodpecker.

ED. S. CURRIER.

I HAVE been surprised, that in none of the publications devoted to our interests, has any writer remarked upon the almost total disappearance of the Downy Woodpecker, (dryolates pubescous) from his usual haunts. Every paper has contained matter about the Blue Bird and how scarce they are all over the country, but in my territory I have seen more Blue Birds since the 1st of March than I have Downys, and it must be the same throughout the wooded country.

Up to this year the Downy has been our most abundant woodpecker the year around but this spring I did not find a single nest, and have not heard or seen more than ten or twelve of the birds during the spring, summer and so far this fall.

I think that the same cause that is responsible for the loss of the Blue Bird: viz., the steady and long continued cold and deep snow that we had during the last two weeks of January and first two of February—played havoc with the Downys.

The Hairy Woodpecker has not been so numerous as usual, either, but their absence is not so noticeable and I do not believe so many perished.

During April and May while tearing out holes in search for nests of chickadee, nuthatch and titmice, I found the dead bodies of six Downy and one Hairy Woodpecker, showing no evidence that they had died from any other cause than cold or starvation.

The First Annual Congress of the Iowa Ornithological Association.

THE First Congress of the Iowa Ornithological Association was held at Iowa City, Aug. 22-23, 1895, in the Zoological Lec-

ture Room of the Science Building.

BUSINESS MEETING, AUG. 22, 2:25 P. M.

The meeting was called to order by the President, Chas. R. Keyes. Nine Active Members were present.

After an interesting address by the President, letters from non-present members, Paul Bartsch, A. I. Johnson and C. F. Henning were read. The two former enclosed papers.

Treasurer's report from organization to Aug. 22, 1895, was read.

Secretary's report having been published in the Iowa Ornithologist, was omitted.

A discussion on interpretation of the Constitution followed, as to the duties of officers, manner of admitting new members, etc.

Agreed that applicant's names shall be voted upon by the Executive Council and if admitted, the Council shall inform the Secretary, who shall inform the applicant of his admittance.

Any person wishing to join the society and not knowing any member, may write to the Editor-Treasurer or Chairman of the Executive Council.

The Council shall have power to expel any member who has proven himself unworthy of membership in so august a body as the Iowa Ornithological Association.

Resolved that the yearly dues be raised to one dollar, ($1.00) for active members.

A warm discussion on the manner of continuing the society and supporting the Iowa Ornithologist.

Resolved that a committee of five (5) be appointed to compile a complete and annotated list of Iowa birds.

After a long discussion on the manner of compiling the list of Iowa birds, the following committee was appointed at the suggestion of the society: Chas. R. Keyes, Chairman, M. E. Peck, Paul Bartsch, J. V. Crone, H. J. Giddings.

This meeting of the I. O. A., consisting of only nine members, found itself entirely helpless as far as performing any business was concerned, because there was not a majority of members which the present Constitution requires to enact business. Hence the following resolution.

Resolved that a committe of two (2) be appointed who, with the President, shall draft a new constitution.

An invitation was received and accepted, from the Curator of

the State Historical Society, asking the members of the I. O. A. to view the collection of that society.

ADJOURNED BUSINESS SESSION.
AUG. 23, 11 A. M.

Consideration of the new draft of the Constitution as suggested by the committee.

Resolved that we accept the revision of the Constitution as suggested by the committee.

The society then proceeded on motion to the election of a finance committee of three (3).

Elected as follows: C. F. Henning, Chairman, B. H Bailey, J. H. Brown.

Resolved that the Secretary be instructed to inform parties applying for reports of the meetings, that a copy of the Iowa Ornithologist containing such report will be sent them.

Resolved that the next annual congress shall be held at Mount Vernon, Ia.

Resolved that the time of meeting be left to the Executive Council, and that they select the time best suited to the majority of members.

PUBLIC SESSION, AUG. 22, 8:15 P. M.

Address of Welcome, Prof. Schaeffer, Pres. S. U. I.

Response, Pres. Chas. R. Keyes.

Paper—Protection of our Birds, W. W. Loomis.

Paper — Warblers of Iowa, Morton E. Peck.

Mr. Peck mentioned thirty-six Warblers found in Iowa. This paper was followed by a discussion of the Warblers, which closed the evening program.

SECOND SESSION, AUG. 23, 9 A. M.

Paper—American Duck Hawk, Geo. H. Burge.

Paper—Birds Extinct in Iowa, and Those Becoming So, Paul Bartsch. (In the absence of the author it was read by J. H. Brown.)

Paper—Relation of the American Crow to Economics, Hiram Heaton.

Paper—Bird Laws of Iowa and Laws that are Needed, J. H. Brown.

THIRD SESSION, AUG. 23, 2 P. M.

Paper—Prairie Hen, A. I. Johnson. (In the absence of the author it was read by Pres. Keyes.)

Paper—Sea Birds that Visit Iowa, F. H. Shoemaker.

Paper—Ruffed Grouse, D. L. Savage.

Mr. Savage also exhibited a fine life size and color portrait of his subject. It was drawn by William Savage.

Resolved that a vote of thanks be extended to the authorities of

the S. U. I. in general, and to Prof. Schaeffer in particular, for their kindness in opening their rooms to our use.

Thus ended the First Annual Congress of the Iowa Ornithological Association. The Association to meet at Mt. Vernon, Ia., in 1896.

J. EUGENE LAW, Sec'y.

The active members should send their votes regarding the acceptance or rejection, of the revised constitution and other proceedings of the First Congress, to the Secretary before the 1st day of December.

J. EUGENE LAW, Sec'y,
Madison, Wis.

Constitution and By-Laws of the Iowa Ornithological Ass'n.

Revised August 23, 1895.

Article I—Name and Object.

Sec. 1—This organization shall be known as the Iowa Ornithoolgical Association.

Sec. 2—Its object shall be to promote a more thorough study of the birds of our state, thus awakening a truer love for them, and enabling the members to "Look through Nature up to Nature's God."

Article II—Members.

Sec. 1 — Members shall be of three classes: Honorary, Active, and Associate.

Sec. 2— Honorary Members: Honorary members shall be elected for their eminence in Ornithology.

Sec. 3—Active Members: Any person, residing in the state of Iowa, may become an active member after having been elected. Active members only shall have the power to vote.

Sec. 4 — Associate members: Any person, interested in Ornithology, may become an associate member after having been elected.

Article III—Officers and Committees.

Sec. 1—The officers and committees of the Association shall be President, Secretary, Editor-Treasurer, and an Executive Council of three (3) members, and a Finance Committee of three (3) members.

Sec. 2—No member shall hold more than one office at any one time.

Article IV—Duties of Officers.

Sec. 1—Duties of the President: The President shall be the official head of the Association and it shall be his duty to preside at any of the meetings;

to enforce a due observance of the Constitution and By-laws; and to perform such other duties as may pertain to this office.

Sec. 2—Duties of Vice-President: It shall be the duty of the Vice-President to perform the duties of the President in case of his being absent or otherwise engaged.

Sec. 3—Duties of the Secretary: It shall be the duty of the Secretary to conduct the correspondence of the Association; to keep a history of the Association; to keep a record of its members and officers; and to notify persons of their election to membership, and members of their election to office.

Sec. 4—Duties of the Editor-Treasurer: This officer shall be the Editor-in-chief of the official organ and shall have power with the consent of the Finance Committee to purchase such supplies as may be needed in its publication.

He shall receive and have charge of all moneys belonging to the Association, and shall pay such bills as are approved and endorsed by the Finance Committee. He shall publish and send with each issue of the official organ, a report of all receipts and expenditures made by him during the preceding quarter.

Sec. 5—Duties of the Executive Council: They shall ballot upon the names of all candidates for membership and a two-thirds vote of the Council shall be required to elect a candidate.

The chairman of the Council shall notify the Secretary of all persons elected to membership. They shall furnish for publication in each issue of the official organ a report of their proceedings. In all cases not otherwise provided for, the Executive Council shall have supreme power; provided, that when their vote is not unanimous, the vote of the President of the Association shall decide.

Article V—Election of Officers.

Sec. 1—The election of officers and committees shall be held annually, at the annual meeting.

Sec. 2—The officers of the Association shall be nominated and elected by a majority ballot of the active members voting, and shall be chosen from among the active members.

Article VI—Salaries of Officers.

Sec. 1—The officers of the Iowa Ornithological Association shall receive no salary, but each officer shall be allowed the actual amount expended by him for the purchase of stationery, postage,

etc., used by him for the Association.

Article VII—The Official Organ.

Sec. 1—The official organ of the Association shall be a quarterly journal, known as the "Iowa Ornithologist."

Sec. 2—It shall contain the report of the officers together with such notes and special articles as the Editor-in-chief and his assistants may decide upon.

Article VIII—Meetings.

Sec. 1. An annual meeting shall be held at such time and place as a majority of the active members voting may desire.

Article IX—Motions.

Sec. 1 — An active member shall have the right to submit any motion to a vote of the Association. The motion must be seconded by an active member.

Article X—Voting by Proxy.

Sec. 1 — All active members not present at the annual meeting may be represented by proxy.

Article XI—Amendments.

Sec. 1—An amendment to this Constitution may be adopted by a two-thirds vote of the active members voting.

Sec. 2—All proposed amendments, except those presented at the regular annual meeting, shall be published in the official organ, and balloting upon such amendment shall not take place for at least thirty (30) days after publication.

BY-LAWS.

Sec. 1—Each active member shall be required to send to the Editor, or to such person as he may direct, any notes he may have upon the families which are under special consideration in the succeeding issue of the official organ.

Sec 2—Associate members may furnish notes on the families if they so desire and both active and associate members are requested to furnish from time to time such special articles of interest as their work and observation may provide them with.

Sec. 3—Names of candidates for membership may be proposed by active or associate members and such proposal should be accompanied by such recommendations of the proposed candidate as the proposer may have in his possession, and shall be forwarded to the chairman of the executive Council.

Sec. 4—The President shall have the power to appoint a committe of three (3) active members to assist the Editor-in-chief.

Sec. 5—The candidate for Executive Councilmen, who shall

receive the largest number of electing ballots shall be the Chairman of the Executive Council.

Sec. 6—In case two candidates for the same office shall receive each an equal number of electing ballots, that one who received the highest number of nominating ballots shall be declared elected.

Sec. 7—The membership fee of active members shall be 50c; this shall cover all dues to the 1st of January after initiation.

Sec. 8—The annual dues of active members shall be one dollar ($1.00), payable January 1st of each year. The annual dues of the associate members shall be forty cents (40c).

Sec. 9—The IOWA ORNITHOLOGIST shall be sent free to all members of the Iowa Ornithological Association.

Sec. 10—The Constitutions of this Association shall be kept by the Secretary. Each member of the Association shall be entitled to copies free of charge.

Sec. 11—All papers presented at the annual meetings shall become the property of the Association and shall be filed with the Editor-Treasurer.

Sec. 12—The By-laws may be amended by a two-thirds vote of the active members voting.

Members of the Iowa Ornithological Association, October, 1895.

ACTIVE MEMBERS.

Omission of the date indicates a Founder.

Anderson, Rudolph M., Forest City	——
Arildson, Peter, Rock Rapids,	1895
Ball, Carleton R., Ames,	——
Bailey, Bert. H., Cedar Rapids,	1895
Bartsch, Paul, Burlington,	——
Brown, J. H., Davenport,	1895
Bryan, William A., New Sharon,	——
Burge, George H., Mt. Vernon,	1895
Carter, Charles, Fairfield,	1895
Coleman, W. G., Boone,	1895
Conrad, Prof. A. H., Fairfield,	1895
Crone, John V., Marathon,	——
Fitzpatrick, T. J., Iowa City,	1895
Gaymore, Miss Mary L., Iowa City,	1895
Giddings, H. J., Sabula,	——
Godley, A. P., Le Grand,	——
Heaton, Hiram, Glendale,	1895
Henning, Carl Fritz., Boone,	1895
Irons, Ernest, Council Bluffs,	——
Johnson, Albert J., Des Moines	1895
Keyes, Charles R., Mt. Vernon,	——
Law, J. Eugene, Perry,	——
Loomis, W. W., Clermont,	——
Newell, Wilmon, Hull,	——
Onley, R. H., Marathon,	1895
Owens, Frank L., Brooklyn,	1895
Peck, Morton E., LaPorte City,	1895
Pierce, Robt. F., Salem,	1895
Richardson, F. G., Mason City,	——
Ross, Thos. C., Fairfield,	1895
Savage, Walter G., Hillsboro,	——
Savage, David L., Salem,	——
Searles, W. W., Lime Springs,	——
Shoemaker, Frank H., Hampton,	1895
Smith, C. C., Decorah,	1895
Stearns, Fred R., Sac City,	——
Statler, Earl C., Brighton.	1895
Tomlinson, Robt. A., Alden,	1895
Triem, Mrs. M. A., Manchester,	1895

Tryon, Charles C., Avoca, - ——
Walters, Mrs. Gus., Cedar Falls, 1895
Webster, E. B., Cresco, - - ——
Wood, Paul C., Spencer, - ——

HONORARY MEMBERS.

Goss, R. D., Few Sharon, - 1894
Savage, William, Wilsonville, 1894

ASSOCIATE MEMBERS.

Baylis, A. W., Cedar Rapids, Ia., 1894
Flint, H. W,, New Haven, Conn., 1894
Maycock, W. H., Salem, Iowa, 1894
McGinty, Paul P., Athens, Ga., 1894
McLaughlin, H. M., Mason City, Ia. 1894
Moore, J. Russell, Milwaukee, 1895
Shearer, Arnon R., Wallisville, Tex. 1895
Wirt, W. J. Gaines, New York 1894

EXCHANGE COLUMN.

Brief special announcements, as "Wants," "Exchanges," "For Sales," inserted in this department free to all members of the I. O. A., and to all subscribers of the IOWA ORNITHOLOGIST. "Dealers can use these columns at regular advertising rates only.

WANTED—A complete file of the Ornithologist and Oologist which was published by Frank B. Webster; also Jordan's "Manual of Vertebrates." Persons having same to sell or exchange, please write at once to

David L. Savage, Salem, Ia.

Wilson's Ornithology, old edition, containing 1200 pages, 900 birds, 400 illustrations, weight 6 lbs., for sale or exchange to the highest bidder. I will exchange for bird's eggs in sets, Indian relics, or geological specimens. I also have old U. S. postage stamps to exchange for Confederate stamps. Address Paul C. Woods, Spencer, Ia.

Photographs of living birds, nests and eggs, and of Iowa, Minnesota and Dakota scenery to exchange for photos of similar subjects. E. B. Webster, Cresco, Iowa.

"Courier" cushion tire bicycle, '92 pattern, fair condition, 30 in. wheels, for sale at $18, or exchange to the value of $20. Address Paul C. Woods, Spencer, Iowa.

The . . .

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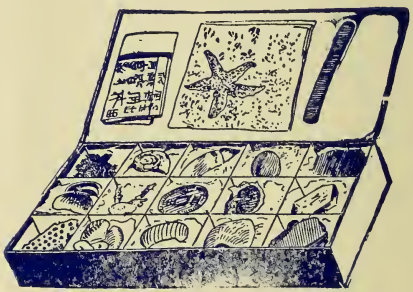

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Vol. 2, No. 2
January, 1896

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The Iowa Ornithologist

Vol. 2. Salem, Ia., January, 1896. No. 2.

Sea Birds That Visit Iowa.

FRANK H. SHOEMAKER, HAMPTON, IA.

Paper read before the First Congress of I. O. A.

UNDER this heading I have considered the species of four orders— Pygopodes, Longipennes, Steganopodes and Anseres. This is indeed an inexact classification of "sea birds," but will meet the requirements of the subject in this case. The order Anseres is probably as a whole the least entitled to a position under the general heading, but owing to the maritime habits of many of the species the entire order is included.

The following list is essentially a compilation, since my residence within the state has been too far removed from watercourses or lakes to furnish opportunity for personal observation. My chief authority throughout is the Report on Bird Migration in the Mississippi Valley during the years 1884 and 1885. Frequent reference is made also to a list of the birds of Iowa, compiled by J. A. Allen, constituting Appendix B in Vol. II of the State Geological Survey of 1870. No more than a passing mention of species can be made at this time.

The order Pygopodes has five representatives in this state— three grebes and two loons. Holbœll's Grebe is a species of northern regions, coming south in winter occasionally to the upper portions of the Mississippi Valley. The Horned Grebe is an allied species, more common than the former, though not abundant; it is occasional in Iowa as a migrant, but it is doubtful if it ever winters in any part of the state. The Pied-billed Grebe, popularly known by a more forcible as well as a more fittingly descriptive name, occurs in all parts of the state as a summer resident, nesting quite commonly, though its eggs seldom appear in the cabinets of those who do not know the peculiar nesting habits.

The family Urinatoridæ is represented by two species: the Loon proper, Urinator imber, and its ally, the Red-throated Loon. The former is the more common variety, inasmuch as it nests in the north and appears regularly during migrations, while the latter variety, the Red-throat-

ed Loon, is a distinctively northern species, and appears only during the winter, very irregularly. Three years ago I saw a flock of Red-throated Loons on a small lake in Franklin county. and after a long detour and much careful crawling in a layer of snow and mud, succeeded in approaching near enough to secure two of the birds at one shot. This is the only time I have found loons of either variety in a flock; the class is not gregarious and I would not be convinced of the identity until I had the birds where I could compare with description.

The order Longipennes has ten representatives in Iowa, four of the species being gulls and six terns. The Great Black-backed Gull is mentioned by Allen as a rare migrant occurring within our borders. It is probable that none have been seen within recent years. The Herring Gull migrates over nearly all of the Mississippi Valley. Franklin's Gull breeds from southern Minnesota northward, passing through Iowa during migration, but is not a common variety. Bonaparte's Gull is strictly northern in its nidification, wintering on the gulf coast and traversing Iowa during migrations. The Gull-billed Tern is chiefly a coast bird breeding on the Gulf of Mexico, but is occasionally reported from the various portions of the Mississippi Valley. The Caspian Tern was taken by J. W. Preston in central Iowa, but should probably be considered as a straggler. It is an irregularly distributed species and is found chiefly along the gulf coast. Forster's Tern is a common variety in northern Iowa, and is generally distributed over the state as a summer resident, wintering on the coast. The Common Tern, according to Mr. Preston before quoted, has been taken in Central Iowa. The Least Tern, while chiefly coastwise in its habitat, is occasionally found in various parts of the Mississippi Valley. I do not know at what place nor at what season specimens have been taken in Iowa, but Mr. Allen names it in his list. The Black Tern is the most common of the class with us as a summer resident.

Of the Steganopodes there are two species. The Double-crested Cormorant winters south and is common during migrations. I have taken several specimens in Franklin county. The American White Pelican winters in the gulf states and passes through Iowa to its breeding place in the north.

The order Anseres has thirty species which have been taken in Iowa. The fish-eating ducks have three representatives, the American, Red-breasted, and Hooded Mergansers, all of which I have seen in Franklin county. The American Merganser winters south and nests north, passing through Iowa as a migrant, one of the earliest. The Red-breasted Merganser is said to be an occasional winter resident in favored portions of the state, but is more common as a migrant. The Hooded Merganser is a hardier species than the former, wintering further north, though not frequently in Iowa, owing to the freezing of almost all the water courses.

The Mallard is an early and abundant migrant. The Black Duck is chiefly an eastern species, seldom found west of the Mississippi River, but according to the Report on Bird Migration it has been known to breed in Iowa. The Gadwall migrates in great numbers to congregate on the gulf coast, but is said to winter in some parts of Illinois and possibly in Iowa. The Baldpate ranges all over North America, wintering far south. The Green-winged Teal breeds chiefly above the United States border, but is a common migrant. The Blue-winged Teal nests further south, sometimes in this state. The Shoveller breeds from Minnesota northward, migrating commonly through Iowa.

The Pintail, the subject of our frontispiece, is an early migrant, but unlike the greater number of the ducks which migrate first it does not nest exclusively in the far northwest. It is a common breeder at Heron Lake, Minn., and at Spirit Lake, Iowa, and has been known to nest in portions of Illinois. The Wood Duck is a summer resident throughout the Mississippi Valley. The Redhead is a common migrant, its range being almost identical with that of the Pintail. The Canvass-back is known to breed at Heron Kake, but I have seen no Iowa record. The Blue-bill and Lesser Blue-bill, or Scaup, ducks occur chiefly as migrants, but are summer residents in the northern part of Iowa, there being several records of nesting at Clear Lake, in Cerro Gordo county. The Ring-neck also has been found breeding there, this being the most southern record of its nesting. It is, of course, chiefly a migrant. The Golden-eye breeds north of Iowa, our only notes on the species classing

it a migrant and rare. The Bufflehead is chiefly a migrant, but is a summer resident in the northern part of the state. The nesting has been noted at Clear and Spirit Lakes. The Harlequin Duck is one concerning which I find no definite Iowa notes, but on the strength of Mr. Allen's list it may be named as a winter visitor. The Black Scoter is another species concerning which specific notes are wanting, but it is mentioned by the same authority. There is a record of the Surf Scoter at LaPorte, accredited to G. D. Peck in the Report on Bird Migration. The Ruddy Duck is a migrant, according to Allen.

Among the geese, we have the Blue Goose, a regular migrant, which breeds on Hudson's Bay; the Lesser Snow Goose, a regular migrant, chiefly following the rivers; the White-fronted Goose, which is known as a migrant in all parts of the Mississippi Valley north of southern Illinois, where it has been known to winter; the Canada Goose, the best known of the Anseres; and the Brant, which occurs as a migrant. The last named is so uniformly confounded with the Lesser Snow Goose that reports on the species are very likely to be inaccurate.

The two varieties of Swans, the Whistling and Trumpeter Swans, occur in Iowa. According to the Report on Bird Migration, the Trumpeter Swan has been found nesting near Newton, Iowa. The Whistling Swan is named on the authority of Mr. Allen's list.

NOTE—During the discussion which followed the reading of the paper, Mr. Morton E. Peck reported the occurrence of the Ring-billed Gull and the Man-'o-War Bird at LaPorte, his home place. Mention was made also of the Least Tern, the species having been seen in Winnebago county.

The Protection of Our Birds.

WILLIAM W. LOOMIS, CLERMONT, IOWA.

Paper read before the First Congress of I. O. A.

THE question how to prevent the depopulation of our feathered friends is beginning to be agitated by many ornithologists and it might be well for us to spend a few moments in discussing the problem. For convenience sake let us consider the subject under three heads: Are birds useful? Is there an un-

necessary destruction of them? And if so, how can they be protected?

I am sure that nearly everyone enjoys listening to the song birds, but here in America we often do not consider the beauty of anything or the pleasure it furnishes, as much as the dollars and cents it produces or saves. So the first thing to be decided is, are birds, financially speaking, beneficial? A recent number of the Youth's Companion had an article on the protection of birds. It says "We have thirty species of insects which subsist on our common garden vegetables and our apple orchards have fifty kinds of insect enemies." It then names the birds that are making steady warfare against the pests, and adds, "The estimated annual destruction of crops by insects in the United States is more than four hundred millions of dollars." Now the more birds that are killed, the greater becomes the damage done by vermin, and it is plain to be seen that if the birds were allowed to multiply it would not be long before they would save to the United States this four hundred million dollars. Would not this be a benefit?

Concerning the usefulness of birds many persons, especially culturists, seem to have erroneous ideas. Every farmer keeps one or more cats to rid his buildings of rats and mice, and he willingly compensates them for their services by giving them a liberal supply of food; but many of these estimable men fairly get beside themselves if a hawk robs them of a chicken. Now I claim that the hawks kill enough noxious animals to more than recompense them for the loss of their chickens. To sustain this statement let me refer you to the time when the legislature of Pennsylvania passed the "Scalp Act." This act placed a bounty of fifty cents on every hawk and owl that was killed. What was the result. Well, in eighteen months the state paid out no less than ninety thousand dollars in cash and saved to the farmers one thousand, eight hundred and seventy-one dollars in chickens.

This made eighteen dollars apiece for every chicken that was saved. Rather expensive poultry. But this was not the worst, for as fast as the hawks and owls decreased, the rodents and other pernicious animals increased, and that year the loss of crops which the department of agriculture attributed to the excessive number of injurious animals was estimat-

ed to be about two million dollars. Does this not prove that the raptores as a class are beneficial ?

The robin is a bird that has incurred the enmity of gardeners. The horticulturists near Boston sent a petition to the legislature requesting that the robin be taken from the list of protected birds. An investigating committee was appointed who found by examining robins' stomachs that nine-tenths of its food consists of an injurious larvæ, proving beyond all doubt that the bird was a great benefactor.

A gentleman from Michigan who signs himself "Amicus Avium" has given special attention to the phœbe and has estimated the amount that this bird annually saves the state. One pair of birds from March 15th to October 1st, rears two broods or ten birds. Each bird eats thirty insects an hour eight hours a day. The gentleman then finds the entire number of insects destroyed and estimates that if they were permitted to live, each one would do one-thousandth of a cent damage to fruit, grain or lumber. Allowing one and a half pair of birds for every square mile in the state, would make a saving of over three and one-fourth million dollars.

I have dealt with only a few species, but have tried to select those that deal with the entire feathered tribe.

Now if we grant that birds are useful, let us turn to the second head of our subject.

No one wishes to leave the forests and prairies in their primitive condition for the sake of the birds, even when he knows the progress of civilization has caused and will continue to cause a decrease in American bird population. We know that there were the same avicular cannibals before the advent of the white man, as there are to-day, but it will take a long time before the hawks or blue jays or cow birds can exterminate a single species. It is of greater evil-workers that I wish to speak.

First is the English Sparrow. These disreputable Britons were brought here to destroy the span-worm, and they must be credited with having done their work well. A limited number might be a good thing, but surely their introduction has proved a case where "remedy is worse than disease." A few years ago these birds were sold for four dollars a pair, and now I do not know but what one could be supplied with them at four cents a pair, so rapidly have

they increased. These foreigners are of such a quarrelsome and pugnacious nature that the native songsters have had to retreat from place to place before them. And now our feathered friends are far from their favorite haunts, and greatly reduced in numbers; unless a helping hand is given they will be compelled to follow in the footsteps of the Great Auk. Of course we have no statistics to show the number of birds that the sparrow destroys, but it is evident to the observer that unless war is declared against him, we must say good-bye to many of our native songsters.

Many birds are used every year to supply the demand of fashion. Mr. A. J. Allen claims that there are ten million American women of a "bird wearing age and proclivity," and that it takes five million perfect birds to supply them. The greater number of these are killed during the breeding season and someone, I do not know who, will have to answer for the hundreds of little birds that are left in the nest and allowed to starve to death. Let us count one little bird for each pair of old ones, this will make two and a half million. (Now some will say that this is too many. Certainly! Not near all are breeding, but all that are, have from one to six to a dozen offspring.) This makes in all seven million, five hundred thousand birds that are annually used to decorate hats and bonnets. Wholesale dealers count one hundred birds to the bushel. This would make seventy-five thousand bushels, or more than enough to fill ninety-three box cars. It is difficult for the mind to conceive of such vast numbers of birds, and to think that they are used for what seems to us, a worse than useless purpose. But what arouses the greatest indignation in the lover of birds, is to see these same feather-bedecked women go to Sunday School, get up before a class of boys or girls and say, "You mustn't rob birds' nests, because it is wicked and only bad boys do that." It is to be hoped that the "New Woman" will bring with her new and better ideas for decorating her head-gear.

Other destroyers of birds are the Great American Egg Hogs —the imitation naturalists who cover up their crimes with a veil they call science. These might be divided into two classes; those who collect for mercenary purposes and those who collect simply to amass a great variety of

birds and eggs. Then we find a sub-class, those who are always collecting and have not time to study just then, but expect to do that after awhile. Why it is that these persons collect so many birds and eggs of the same species is a mystery. One complains about his hard luck, saying he got only one hundred eggs all day, one brags about taking one hundred and seventy-five eggs of a rare bird; another boasts about "scooping" as he called it, one hundred and twenty dozen in one day. What is the object of this wholesale destruction ?

If it were permissible for me to criticize so eminent a naturalist as Dr. Coues, I would say I do not agree with him. He says in his "Key," "How many birds of the same kind do you want ? All you can get. At least from fifty to one hundred, and more of the commoner varieties." That is all right for colleges and museums, where there are many persons to examine the specimens, but not for the private collector. I am afraid that the worthy gentleman himself would soon object if each of the several thousand collectors in the United States would follow his advice. It is difficult to see how he expects to advance science so much more by his one hundred stuffed birds than by the student who goes out and takes notes from life. I will quote from Emerson, "The bird is not in its ounces and inches, but in its relation to nature, and the skin or skeleton you show me is no more a heron, than a heap of ashes or a bottle of gases into which his body has been reduced, is Dante or Washington." We cannot tell about the character or habits of a person by examining his body after he is dead and embalmed, yet it is by preserved specimens of birds that the worthy gentleman attempts to work. What is needed is more students and less collectors.

We all know of the great damage done by the pot hunters and the small boy who robs nests and kills birds "just for fun," but this can be remedied by proper laws. It is the question of how to protect the birds against other enemies, that we are to discuss.

What is to be done with the English Sparrow ? One man suggests that if every collector would invest in an air-rifle and use it on them it would reduce their numbers This might help, but I am afraid that it would take more air and patience than could be found. Out of the many ways which have been suggested, the

only feasible one—at least in my mind—it now employed by a few of the states, paying a bounty on the pests.

To prevent or rather change the fashion for wearing birds, some advocate legislative action against hats trimmed with feathers. It is a question in my mind whether such a course would prove feasible, for the ladies have as much right to use the birds that way as some of our collectors have to hoard them away in their cabinets. It is quite generally agreed that the only way is to appeal to the better nature of the ladies and trust them to put away the fashion and take up something more in keeping with the close of the nineteenth century. Many ways are suggested for bringing the subject before the public. One is by placing placards in street cars, another is by distributing slips in churches, on which are printed a a few statistics showing the number of birds that it takes to supply the demand, etc.

The next and most difficult question to solve is how to convince the farmer that he is injuring himself every time he kills an owl or robin or the other birds that he probably believes to be his enemies. Now we all know that there are some "black sheep" among the birds. It seems to me that one of the objects of our association is to point out to the farmer just which these "black sheep" are. It is perfectly natural and right for a man to protect his property, and even if he knows that many of the raptores are beneficial, he does not like to have them take his poultry. I do not know how to prevent the hawks from taking toll for their work, but if the farmers would build respectable chicken-coops, they would not be troubled with owls, for they being nocturnal are not out until the chickens have gone to roost and it is only the farmer who allows his poultry to sleep in trees that suffers, and we might say in the words of the small boy, "It's just good enough for him."

Finally, I would say that the only way to preserve our birds is to present facts to the people showing them the true character of each bird. They can then distinguish how the birds should be treated, protecting their friends and destroying their enemies.

Thus by awakening the farmer to his own interests, securing needful laws, and with a never-ceasing warfare against the

pseudo-naturalists and English Sparrow, we may in time hope to recall to their own homes, our favorite friends, the pursued and persecuted birds. As they return to our door yards and take up life as in the days of yore, we will become better acquainted and realize more fully their great mission in this world.

This return will serve as a death warrant to the avaricious collector and as an impetus to the student who devotes his life to the exploration of the characters and habits of these, the favorites of nature.

Notes on the Birds of Iowa.

JOHN V. CRONE, MARATHON, IOWA, COMPILER.

THE Vireonidæ, our family for special study this quarter, is quite well represented in Iowa, the reports embracing definite notes from sixteen counties, and upon seven different species. No doubt the notes would have been more profuse were it not for the fact that ornithologists are somewhat tardy in becoming acquainted with the different varieties of our smaller birds.

624. *Vireo olivaceus.* (*Linn.*)

RED-EYED VIREO.

The Red-eyed Greenlet is of wide distribution, not being confined to the U. S.

In Iowa it appears to be quite generally found. However, the notes show a dearth of either the birds or enthusiastic ornithologists in the west and northwest portions of the state, since it is reported from only one county,—Pottawattamie—in that region, while there are profuse notes on the species from fifteen in the eastern and central parts.

It arrives in the state in late April and early May, breeds during late May and all of June and leaves during the latter part of August or September.

It is a more numerous migrant than summer resident; but is not rare by any means during the breeding season, being reported as "common" or "abundant" by nearly all who mention the numbers found through the period of nidification. Assuming all those who reported on the species to be equally versed in our favorite science, the numbers vary considerably with locality. Most likely this is due to the topography of the country in question.

The nest is pensile—a trite statement to most lovers of birds,

yet new to some of our readers perhaps—and is a beautiful and interesting structure. The site varies considerably in elevation as will be seen from the following quotations: "under thirty feet in elm and ash trees;" "swung from the low branch of some bush or tree, between five and ten feet from the ground;" "low branches of large trees or near the tops of saplings;" "near ground between five and twenty feet up;" "lowest limb of maple tree, seven feet up;" "suspended from the fork of a slender limb, usually a few feet up; sometimes quite high;" "almost any height from the ground."

The "little basket" is "deeper and narrower than that of V. gilous." It is "built of interwoven vegetable materials, hempen fibers and the soft inner bark of trees," a preference being noticed by Mr. Shoemaker for the inner bark of the dead elm and ash. Mr. Giddings reports a nest "composed of grass, pieces of hornet's nests and spider webs. The hornet's nest had furnished fully one-half of all the nest. It was lined with hair and fine grass." Another nest described by Mr. D. L. Savage, was "composed of fibers from the milkweed. Grass and cobwebs were profusely used on the outside." It was "pensile and cup-shaped and lined with reddish fibers."

The worst that can be gleaned from the reports on our little Greenlet is, that it, innocently and unwittingly no doubt, helps to sustain that despicable pest, the Cowbird.

Mr. D. L. Savage and Mr. Law each report sets of $\frac{1}{4}$ V. olivaceous and 1-1 Molothrus ater. In the nest before mentioned Mr. Giddings found on June 12, 1895, two eggs of the Vireo, and one of the Cowbird. The next day there were three eggs of the Vireo, and two of the Cowbird. He finds the Vireo much imposed upon by the Cow bird. Mr. C. C. Smith says, "With the exception of the Chipping Sparrow, perhaps no bird is so much imposed upon as this Vireo. I think that the Vireo will desert the nest if the egg of the Cowbird is deposited first because one will often find one or two eggs of the Cowbird in a deserted nest of the Vireo. Two or three eggs of the Vireo with from one, two or three of the Cowbird is the usual number. I have seen the following combinations, 624 1-4 and 495 1-1; 624 1-3 and 495 1-1; 624 1-3 and 495 1-2; 624 1-3 and 495 1-3.

Evidently the Red-eye is not

much in fear of man, since Mr. Heaton finds it a regular resident in his door yard where it is under observation at all times; and Mr. Barstch has found it nesting in the cities of Burlington, Decorah and Iowa City.

The species has a "loud, clear song that can be heard in any woodland." It is "one of our best and most persistent songsters continuing during its entire stay." It "may," says Mr. Smith, "be heard at all hours of the day. Its song is rather monotinous and is uttered as the bird flits about among the foliage. It has also a characteristic alarm note which is uttered when the person gets too near its home; and the note is nearly always a sign of the near proximity of the nest."

626. *V. philadelphicus.* (*Cass.*)

PHILADELPHIA VIREO.

This species is reported from only two counties—Scott and Jackson. Mr. Giddings thinks it may breed in Jackson county, since he has noted it there during the breeding season. He finds it very rare, having seen the bird only a few times. He first saw the species for the season of 1895, on June 1st.

Mr. J. H. Brown finds it not uncommon in Scott county. In some seasons he finds it a quite common migrant. He agrees with Mr. Davie that it is very like V. gilvus, but finds it much more quiet during migrations, "seeming to prefer tree-tops and rural districts." He finds it rather erratic, being common one year and perhaps rare the next.

Mr. Davie says, in his Nests and Eggs of N. A. Birds, that the species is "not common whereever found;" but that "in portions of the Mississippi valley it is more common than in the eastern states occurring regularly and in considerable numbers during the spring and fall migrations." The I. O. A. needs to take this species especially in hand and develop information concerning it.

627. *V. Gilvus.* (*Vieill.*)

WARBLING VIREO.

This species does not seem to be so widely and generally distributed as the Red-eye, or else it is not so well known. It is reported from twelve of the sixteen counties heard from. "Common is the word most often used in connection with its numbers. The compiler judges that next to the Red-eye, it is the most numerous species in Iowa. The dates of its occurrence are from April to

September. June seems to be almost exclusively its nesting season. Davie reports it as nesting in May and June, but it must nest in May farther south, since none of the notes report it earlier than June 12th. The compiler finds its commonest date of nidification to be about June 20th.

The nesting site is higher than that of the Red-eye, or any other reported. "Frequently nests in tops of maples in door yards as high as forty feet;" "usually thirty or forty feet;" "generally higher than that of the Red-eyed Vireo;" "usually placed at a considerable height;" "high among trees;" "usually in horizontal crotch at greatest possible distance from crotch of tree."

All that can be gleaned from the reports about the nest itself, is that it is pensile, cup-shaped and lined with fine grass. The nest in the prairie groves of Buena Vista county is generally composed of coarse grass and bark strips, very neat though rather rough on outside, and is lined with down from the seed of the cottonwood tree.

Mr. Brown finds that the species seems to prefer the vicinity of towns in migrations, but of groves and open woods for breeding. Mr. Peck notes that it "nests about houses and along the edges of woods." With Mr. Smith it "inhabits the shade trees along the street." Mr. D. L. Savage finds it nesting "near the abode of man."

Those who are acquainted with the Bronzed Grackle will call to mind how, when one of these is aroused, it will utter its loud and excited cries, soon calling around it others who join in throwing imprecations upon the intruder, and follow him from tree to tree. The compiler has often found the nest of gilous by thus disturbing the Grackles, who in turn are scolded by the Vireos, if the domain of the latter is intruded upon. The note of the Vireo in such cases when it fears the safety of its nest, somewhat resembles the cry of a cat.

Mr. R. M. Anderson found a nest in much the same way, by climbing to a Robin's nest which chanced to be near that of the Greenlet.

Reports upon the habits of the species are somewhat meager. Mr. Bartsch refers us to the beautiful lines appended to the description of the species by Coues. but I fear that these same beautiful lines are not accessible unless one is near a college library,

or so fortunate as to own a copy of Mr. Coues' valuable work.

The following from the pen of our honorary member, Mr. William Savage, will be interesting to all. "He seems to be always cheerful if we may judge by his song; but he is not safe from marauders. Snakes, cats, weasels and minks often lay waste his possessions. June 15, 1895, I found a nest containing three eggs. In a few days three little scrawny young birds were wriggling in the nest making fruitless efforts to raise their heads as I approached. The next day one was gone and the day following, the other two had shared the fate of the first. I cut the sprig of hazel off that held the nest and made it a point to pass that way frequently. Soon I discovered the murderer, a beautiful snake, about sixteen inches long—what we term the house snake—suspended in the hazel bush, with his head and neck protruding over the very place where the nest had been. (It is needless to say I slew him.)" The nest which Mr. Savage mentions was four feet up.

Mr. Anderson found a nest five feet up. The bird was a close sitter and allowed herself to be caught in his hand.

It is reported as a lively and pleasant singer almost as much so as the Red-eye but with a sweeter song. Mr. Smith writes that it sings during May and June, then is silent to August 15, when it again sings till its departure. Mr. Bryan notes it as a beautiful singer and interesting species.

628. V. flavifrons. (*Vieill.*)

YELLOW-THROATED VIREO.

Flavifrons is reported as being not so common as the Warbling and Red-eyed species. Probably there would be a contest between it and bellii for third rank in numbers. It is perhaps more evenly distributed than the latter and not quite so plentiful where found.

Like most others of its tribe it reaches the state in late April and early May, but the reports indicate that it is somewhat early in its arrival. Its stay seems to be briefer also, since it is reported as being last seen as early as August 10.

The nesting site is chosen at a considerable elevation, usually, though Mr. Law reports one from Dallas county in a hazel bush one foot up. Others mentioned are "in hickory tree fourteen and one-half feet up;" "an oak, twenty-five feet up;" "near the

top of a high tree;" "in burr-oak tree twenty feet from the ground;" "ten to fifteen feet up." "The nest," says Mr. Peck, "is a beautiful structure. It is covered with lichens much like a Blue-gray Gnatcatcher's, and is very hard to find.

Mr. Anderson mentions a nest composed of dry grass, cottony substances, thin pieces of bark and moss, and almost covered with bits of newspaper in two languages; which latter item leads the analytical mind of our correspondent to inquire whether the bird may not possibly be a linguist. The nest was lined with reddish strips of grape-vine bark. This nest was located in the same tree as those of a Robin and Mourning Dove, and contained four eggs of the Vireo and one of the Cowbird.

A nest reported by Mr. D. L. Savage was outwardly composed of spiders' webs and fibers of of wild grape-vine bark, then a coating of newspaper and a lining of fine grass.

The Yellow-throated is "a large, stout species," robust built, and "the brightest colored of our Vireos."

While the song is described as being "slow, almost slovenly," and "with a peculiar languid drawl," and lacking the animated delivery of olivaceus and gilvus, yet it is much admired by Mr. Heaton, and the bird is considered a fine songster by Mr. Giddings.

The female is a close sitter, leaving the nest reluctantly and and even in some cases requiring to be displaced by the hand. It is not averse to making its home near the abode of man. Mr. Wm. Savage reports one pair, who, when robbed of their treasures, presumably by the Blue Jays, tore the old nest to pieces and rebuilt in a tree only six feet from the door of his office and fifteen feet up. He finds one pair every year breeding in a grove of about two acres near the house. He notes, though, that even so close a proximity to the dwelling of man does not free the species from the "piratical tyrrany of the Kingbird."

Mr. Woods finds "four rosy eggs" to be the usual complement, and that they average larger than those of the Red-eye and Warbling. Mr. Smith reports a set which average 80x59, 82x60, 80x60 and 82x59.

One case is reported where the bird left the nest which was found before the eggs were laid, although it was not in any way

disturbed. Mr. Anderson says that "the birds scold with great vehemence when a person comes near the nest and continue as long as he remains in the vicinity even though some distance away."

629. V. solitarius. (*Wils.*)

BLUE-HEADED VIREO.

Mr. Brown reports solitarius as a not uncommon migrant in Scott county. He says that it is retiring and hurried, there seldom being more than a few days between the first arrival and the departure of the bulk. He finds it usually in large woods.

In Black Hawk Co., Mr. Peck finds it a sometimes abundant, but usually not very common migrant. It appears early in spring, in company with the hardiest of the warblers while on its way to its breeding grounds, chiefly north of the U. S.

Mr. Bartsch has never observed the bird at Burlington but took two specimens at Iowa City on the 6th of May, 1895. In actions he found them quite similar to the Yellow-throated.

Mr. Anderson has taken two females of this migrant species in Winnebago Co.; one May 14, 1892, and one Sept. 18, 1894.

631. V. noveboracensis. (*Gmel.*)

WHITE-EYED VIREO.

Mr. Bryan has seen this variety of the Greenlets quite common in the edge of the woods along Squaw Creek in Story Co. He also has specimens taken in Mahaska Co.

Mr. Wm. Savage reports it as a resident in VanBuren Co., but not very common.

Mr. Brown says that while not much seen in summer it is a not uncommon summer resident and fairly plentiful in spring.

Mr. Bartsch writes as follows: "Only two of these birds have come under my observation; one at Burlington some years ago, and one at Iowa City last spring. This bird prefers the low, dense willows and especially small trees overgrown by a dense mass of grape-vines. Had it not been for the lively and pleasing manner with which they delivered their clear, ringing song, I should have overlooked them in a tangle of green."

Mr. D. L. Savage sends the following valuable notes in this connection: "Not common. Have never found a nest, although I have noted the birds in migrations, and also quite late in the spring. Mr. Walter G. Sav-

age, VanBuren Co., found a nest with two eggs, July 18, 1894. Nest was placed in hazel bush eighteen inches up and composed of pieces of rotten chips—such as the Chickadee pecks out of its hole—moss, small pieces of leaves, cobwebs and lined with very fine grass and inner bark fibers of wild grape-vine.

633. V. bellii. (Aud.)

BELL'S VIREO.

The notes on this Vireo are not voluminous enough for the compiler to derive from them any general conclusions as to numbers, dates and nesting site.

Mr. Law finds it abundant in Dallas Co., but less so in Winnebago. He has found the species breeding in the former, and Mr. Fred Hamlin took a set of three incubated eggs on June 23, 1894. One of these was situated in a hazel bush one foot up.

Mr. Woods finds it of common occurence in Fayette Co., but not abundant. "The eggs average a trifle smaller than the other species."

Mr. Peck, writing from Black Hawk Co., reports it abundant everywhere among thickets and underbrush in summer. The nest, which is small, he finds situated two to six feet from the ground. Noted as a late migrant, breeding far into August. It "is almost as quarrelsome," he says, "as the Yellow-throated. Its song is lively and shrill and distinguishable at a great distance."

Mr. D. L. Savage says, "Not uncommon, favorable locations being in bramble bushes and thickets of undergrowth. It has a rollicsome little song which always brings gladness with it. I have never had the good fortune to find a nest, although I have searched repeatedly for it, while the old birds were making quite an ado. It must be well concealed."

Mr. Bryan writes that he has seen it quite numerous in Mahaska Co., along wood-roads; and has secured one nest in a hazel bush in a river pasture.

Mr. Irons says that the well known voice of this little bird is a familiar sound in the woodlands of Pottawattamie Co.

Mr. Brown finds it a quite common summer resident in Scott Co., nesting in late May and early June, usually at the low elevation of from two and one-half to ten feet. "A quiet, retiring species and much more common in the small brush patches in prairie districts than in the vicinity of water courses or heavy woods."

Mr. Giddings' notes from his recent personal experience with the species are in full as follows: "A common summer resident in this (Jackson) Co. Not much known except to the ornithologist and collector. The home of this species is in the thickets of brush and bramble, where it builds its nest unknown to those who pass close by. The nest is suspended from the fork of some small bush within a few feet of the ground, composed of dead leaves, grass and strips of grape-vine bark. Generally somewhat ragged on the outside. Four eggs seem to be the usual number and I never found any other in complete sets. Nests mostly well concealed and hard to find. I have found the best way is to get down and creep on the ground, and by looking up, the nest can often be found quite easily.

"This species is, to me, the most interesting of the Vireos, and I hardly ever tire of listening to its lively song, or watch it flit from bush to bush. Near my place is a thicket of hazel, black-berry, sumach, and a few small oak trees interspersed; just the place for Bell's Vireo, and I can hear it singing at most any time during the summer from my doorstep.

June 9, 1895, I started out to find some nests and soon succeeded in finding two. The first was hung from a small hazel bush, four feet above the ground and contained two eggs. Nest measured 3 in. deep; 3in. in diameter outside; cavity $1\frac{3}{4}$x$1\frac{1}{4}$. June 11, 4 eggs; they averaged .68x.50, pure white, quite well spotted with red. The second nest was in a place where the bushes were quite low; was hung from fork of hazel bush three feet from ground. The nest was composed of leaves, grass, bark of grape-vine and plant down, lined with fine grass and hair. Measured four inches deep; $2\frac{3}{4}$ in. in diameter on the outside; $1\frac{1}{2}$ in. deep by $1\frac{3}{4}$ in. inside. Contained four eggs above the average size and pure white with a very few small red spots. Eggs measured .74x.52 average, with scarcely any difference in them.

"I have not found this bird imposed upon by the Cowbird."

Our readers will realize that to cultivate the acquaintance of the little Greenlets is to gain health, pleasure and profit—health from walks in the leafy woodlands and exercise in the fragrant air; pleasure from the music of their voices and study of their ways; and profit from health, pleasure and the priceless teachings of Nature.

The . .
Iowa Ornithologist.

A Quarterly Magazine Devoted to the Study of Ornithology and Oology.

DAVID L. SAVAGE,
EDITOR AND PUBLISHER.

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Address all communications to David L. Savage, Salem, Iowa.

Notes and News.

We have received a very complete list of Iowa birds from J. L. DeVine of Chicago, Ill., formerly from Iowa. Much to our regret, we cannot publish the list in the I. O. for lack of space.

Mr. D. S. Ebersold of Oceanus, Florida, collector of natural history specimens—his ad is on another page of this magazine—was once an Iowa boy. He followed the plow, hoed corn and did other rural work in Butler Co., and has many relatives there now.

The Naturalist and Collector of Abington, Ill., edited by P. Wilber Shoup, has been discontinued as it did not receive sufficient patronage to warrant its continuance.

Mr. Paul Bartsch of Burlington, Iowa, reports the taking of a Barn Owl at that place on Nov. 22, 1895.

The American Ornithologists' Union held their Thirteenth Congress at Washington, D. C., on Nov. 12-15, 1895, with an average attendance of fifty ornithologists. The officers elected by the Union for the year, were as follows: President, William Brewster; Vice Presidents, Robert Ridgway and C. Hart Merriam; Secretary, John H. Sage; Treasurer, William Dutcher.

Dr. A. E. Foote, the distinguished scientist of Philadelphia, died Oct. 11, 1895, in Atlanta, Ga., to which place he had gone to take charge of the Pensylvania mineral exhibit.

Dr. Foote was born in Hamilton, N. Y., Feb. 6, 1846. Soon after graduating at the State University of Michigan in 1867, he was appointed assistant professor of chemistry and mineralogy in the Iowa State College, which place he held for five years,

being very successful as a teacher. In 1875 he moved to Philadelphia, and began the building up of his now world wide business in minerals and scientific books. He was married in 1872, to Miss Augusta Matthews of Iowa, who, with two sons and a daughter, survives him. His business will be continued by Warren G. Foote, a son of the deceased, as manager.

Mr. J. H. Brown, Iowa City, Ia., writes: "I shot three Greater Redpolls on Jan. 11, and one the 13th inst. They were undoubtedly of the variety Acanthis linaria rostrata (Coues). I have never seen mention of this variety occurring in the state before.

Mr. John V. Crone has a live Snowy Owl which was wing-tipped and captured near Marathon, Iowa, about Dec. 20. He is thriving on a diet of meat of different kinds, including sparrow, turkey, grouse and pork; diversified by occasional bites from his captor's fingers.

Prof. Gus. Walters, Cedar Falls, Iowa, writes: "We are taking some interest in birds here. Have captured the Purple Finch and Rusty Grackle. Secured a fine Meadow Lark, Dec. 27—rather late for him.

The Northwestern Ornithological Association held its second annual meeting at Portland, Ore., Dec. 27, 1895. The forenoon was devoted to business; the afternoon to reading of papers and election of officers. The officers chosen were; Wm. L. Finly, Pres.; Ellis F. Hadley, 1st Vice Pres.; Guy Striker, 2d Vice Pres.; Arthur L. Pope, Sec.; D. C. Bord, Treas.

The N. O. A. is a live association, as is shown by the fact that the past year it has compiled a list of Oregon birds embracing over twice as many as were ever before contained in a list of birds of Oregon. This list is being published in the Association's official organ, the Oregon Naturalist and will number 254 species and sub-species.

Hereafter the Association will admit associate members from any part of America, and its members expect to have a phenomenal growth during the next few months. For particulars address the secretary at McMinnville, Ore.

A. I. Johnson, DesMoines, Ia., while out collecting Nov. 25, saw two Robins and Dec. 3, secured two Red-winged Blackbirds from a flock of 8.

New Books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor, who will examine them personally and give them due consideration.

"A. O. U. Check-list of American Birds." This book was prepared by a committee appointed by the Union, namely, Elliott Coues, J. A. Allen, Robert Ridgway, William Brewster, and H. W. Henshaw. This is the second and revised edition, the original edition was published in 1885. The new edition includes numerous additions and nomenclatural changes made since the publication of the first, together with a revision of the "habitats" of the species and sub-species, but omitting the Code of Nomenclature, which was published separately in 1892. It is expected that the new Check-list will remain without another edition for at least ten years. It should be in the hands of every ornithologist.

"The Popular Science News" for January is much improved and enlarged. This magazine fills a special field; it seems that it is intended more for the general reader than the specialist, yet neither can afford to be without it. Probably there is no paper in America that is doing more to popularize science and to interest the general public in scientific knowledge, than this journal. We do not hesitate to recommend it to any one who desires to keep abreast with the discoveries and news in the scientific world.

The December, 1895, issue of the "Nidologist" shows a marked improvement by way of illustrations. Among the features above par, the elegant design on the cover presents itself. The view of Heligoland, "the magnetic pole of the bird world," is of consummate interest. Last, but not of the least value, is the halftone of the bretheren at the A. O. U. Congress at Washington; this illustration alone is worth a year's subscription.

"The American Zoologist and Journal of Science" made its ap-

pearance with the new year. The first issue of Vol. 1, contains thirty-six pages of very interesting and instructive reading matter. It is edited by J. Hobart Egbert of Holyoke, Mass.

Publications Received.

Barrows, Walter B., and E. A. Schwarz. "The Common Crow of the United States," Bull. No. 6, U. S. Dept. of Agriculture, 1895, pp. 1-98, 1 pl. 2 figs.

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"Game and Shooting." Vol. 1, No. 11.

"The Linnean Fern Bulletin." Vol. 4, No. 1, January 1896.

For the lack of space, we cannot give further mention of publications received. In our next issue we shall give more space to this department.

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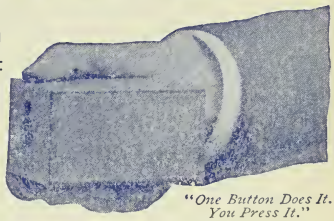

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TABLE OF CONTENTS

Sea Birds That Visit Iowa, F. H. Shoemaker, - - 31

The Protection of Our Birds, W. W. Loomis, - 34

Notes on the Birds of Iowa, John V. Crone, - - 40

Notes and News, - - - - - - - 49

Book Review, - - - - - - - - 51

Publications, - - - - - - - - 52

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Vol. 2, No. 3
April, 1896

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TABLE OF CONTENTS

Notes on Traill's Flycatcher in Pottawattamie Co., E. E. Irons 53
The American Crow, H. Heaton, - - - - - - 55
Warblers of Iowa, Morton E. Peck, - - - - - 58
The Red-tailed Hawk, Carl Fritz Henning, - - - 66
The Sparrow Hawk, "Falco Sparverius," - - - - 71
Of Historical Interest, A. I. Johnson, - - - - 72
Urinator Arcticus in Jackson Co., J. Giddings, - - - 73
A Reverie, J. R. Bonwell, - - - - - - - 73
The Blue-bird, a Vision of Spring, Lotto Wildwood, - - 74
The Rambler Noticed - - - - - - - - 74
The Red-shafted Flicker in Central Iowa, C. F. Henning, 75
Book Review and Publications Received, - - - - 76

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(Mr. James C. Watson and B. E. Griffiths were admitted some time ago, but their names were accidentally ommitted in the October I. O.)

We extend an invitation to all lovers of birds to join our ranks. Application for membership may be sent to any of the officers.

J. Eugene Law, Sec'y.

American Sparrow Hawk.
Falco sparverius.

The Iowa Ornithologist

Vol. 2. Salem, Ia., April, 1896. No. 3.

Notes on Traill's Flycatcher in Pottawattamie Co.

BY E. E. IRONS, COUNCIL BLUFFS.

WHAT pleasanter sight can there be to the student-lover of Nature, than the alternate patches of woodland and meadow dotting the landscape, enlivened by Nature's myriad voices and made yet more joyous by the sunshine of a day in early June ? How happy the hours we spend in contemplation of the wonders of creation, as we wander in the grassy fields or rest in the shaded grove.

Yet, while we fain would linger on and in this paradise, we are brought to realize that all spots are seemingly not as favored as this one which we recall. If we would meet Nature in all her garbs, we must not remain in one locality but go where different conditions exist. With this aim, let us leave rivers and wooded valleys and travel out some miles over the prairie.

Picture in your mind, cornfields, dotted over with green blades, with here and there a stretch of pasture land. The sun beats down with steady heat, the forerunner of August days to come. We seek some spot where we may escape the sun's rays. Down a valley, or draw, we see a clump of willows, their shadows offering an inviting refuge. They follow the windings of a little spring, which, owing to the slight fall in elevation, has made the ground quite spongy and damp. The trees grow very close together, in many places being not more than three or four feet apart, their tops forming a perfect screen to the ground beneath. Such the place and circumstances in which I renewed my acquaintance with that interesting little bird, Traill's Flycatcher.

It is not my intention to leave, with any reader of this article, the impression that to meet this little bird, one must make a pilgrimage across the the prairies; on the contrary, I was much surprised to meet with it at all in the locality. I had supposed there to be very little of interest to me in my study of this particular clump of willows, as I had passed so many times without

noting anything in particular.

June 15th, 1894, found me sitting resting in this little grove, after a hot and unsuccessful tramp over the fields. As I reclined in the shade, my eyes wandering from tree to tree, suddenly there seemed to develop the form of a nest, which proved to be that of a Traill's Flycatcher, situated in a sapling under which I had passed many times before. I rose and approached and as I did so the proprietor appeared, as if to enquire into the intrusion. I recognized the little fellow and he may have recognized me. The nest was in architecture a typical specimen, placed ten feet from the ground in the crotch of a willow, and contained three partially incubated eggs. The bird was unusually tame and hopped about without showing much fear. This was, in my experience, not generally the case with this flycatcher, although I have sometimes approached quite near to the birds without seeming to alarm them.

My next meeting with this species occurred June 18, for I had determined on a closer acquaintance. A little further down the valley I found my next nest. This was six feet from the ground in the fork of a willow, composed of willow dun and fibers of bark and contained four fresh eggs.

Another nest was noted about this time, in process of construction, and was watched until nearly completed. A day or so after, on going to inspect the nest, there was nothing to be seen. Closer examination revealed a trail of material leading off through the willows. On following the track marked by bits of cotton and fibers sticking to twigs and branches, a rather large, slovenly nest appeared, and from it flew a Yellow-billed Cuckoo. On inspection the nest was found to be lined throughout with the material from the flycatcher's nest. That same night a heavy rain and wind storm came on, and next morning, beneath the cuckoo's nest, lay one of her eggs, broken —swift retribution—if it may be so regarded. With this incident closed my experience for 1894.

Recalling my experience and surprise of last year, I one day set out for the scene of my former investigations. My first nest was found on June 20, 1895. It was situated in a red willow crotch, $6\frac{3}{4}$ feet from the ground, composed, like others, of bark fibers and willow down. It was quite bulky

for the species and rather rough in construction. It contained three nearly fresh eggs.

Altogether, some ten nests with sets were examined and in all, a marked similarity existed, both in situation and construction. Sizes of nests varied to some extent, but were mainly as follows: Diameter outside, $2\frac{1}{2}$-3 inches; inside, 2-$2\frac{1}{4}$ inches. Depth outside, 2-$2\frac{1}{2}$ inches, inside $1\frac{3}{4}$-$2\frac{1}{4}$ inches.

It has not been my aim to burden the reader with individual description of size and markings of sets, but a short generalization may not be out of place. There are two types of coloration to be observed in the eggs of this species. In the first, the ground color varies from nearly white to a rich cream with a pinkish tinge, fading when blown. The spots are light chestnut brown, bold in marking and sometimes increasing to blotches, but in general are sparsely scattered over the larger end. In the second type, the ground is darker and the spots dark brown approaching black, of much smaller size and more numerous. I have observed sets having eggs of each type in the same set, but usually eggs of the same set are similar. In one set before me, the ground color is almost white with very few markings.

These few notes have been taken from my field-books, covering observations of two years. Several other nests with eggs, aside from those mentioned, were found and also allowed to hatch, but unfortunately I was unable to watch the rearing of the young on account of limited time. Nothing could have pleased me better than to have remained with my bird friends the summer long, but business cares demanded my return and I regretfully left for my city home with an increased love for my little friends of the summer.

The American Crow.

BY H. HEATON, GLENDALE.

Paper read before the First Congress of I. O. A.

The relation of the American Crow to Economics:

The considerable size of the Crow and the great numbers in which it is found make it worth consideration in its relation to the welfare of mankind.

Not much time need be given to it as a food product, notwithstanding that Prince Murat, while pursuing his studies in Natural History in Florida and receiving

nothing on testimony, but following the injunction of "proving all things", declared "zat ze crow will do, but ze buzzard is not fit to eat". Still, with the annual recurring of the annual political conventions, there are numbers of workers who eat crow and declare that it is good.

If the crow is not destined to become a food product, its agency in making life for man more tolerable than it would be without it, is not to be so briefly dismissed. It seems to have been the belief of primitive man, that the crow was more immediately under the care of the gods than any other bird; hence the Roman augur's regard for it, which should give his name to the city, was by Romulus and Remus determined by the number of crows either might observe. A land where many crows were found was a land blessed of the gods, that is, it was a land where the conditions were favorable to man's existence. But the time of this belief has gone by, and man wants proof of his statements rather than sentimental superstitions. Is the crow helpful to human existence ?

In the New England states, many of their largest fields of corn, containing as high as two or three acres, are at times almost ruined by the depredations of the crow; digging out the newly planted seed and eating it and pulling up the new blades and devouring the kernel at the root.

Some men indeed believe that this latter plan is the crow's means of getting at worms that are preying on the corn, and as a proof of their position they tell us they find the grain of corn still intact with the stalk. Of course, scare-crows reduce the losses which would otherwise be inflicted; at the same time furnishing nesting places for smaller birds. A still better method of guarding against the ravages of the crow, is to stretch a number of twine strings both ways across the cornfield, which the crow will suspect to be a large trap or snare and avoid, but will furnish material out of which orioles and many other birds may construct nests, as the device is not intended to frighten any bird but the crow.

Within half a mile of my house there is a rookery or resort of the crows, where at certain seasons several hundreds congregate at nightfall and return to their several fields of labor the next morning, making such a cawing at separating as to often disturb my morning sleep, yet in all the

years I can remember but once they have taken corn to any serious extent. Some fifteen years ago they attacked a twenty acre field of corn and not only took the first planting but several replantings. The farmer, with two young men—his nephews—spent day after day replanting the corn the crows would take and with guns at hand would try to destroy his persecutors, but I believe their shotguns in no instance had range enough to reach the crows —which were always in a distant part of the field.

Often in spring time the farming community is startled by shrill cries of distress proceeding from the watchful house-wife frightening crows from the poultry yard. But as the season advances the crow grows ashamed of these outcries, and proceeds with more caution to visit the poultry yard and avoids disturbing the housekeepers already overtaxed with numerous cares. A little care on his part enables him to secure as many eggs from the barn-yard, and at the same time leave the weary house-wife in peace.

Some crows capture mice, grasshoppers, crickets, white grubs, etc., for the Ornithologist of the Agricultural Department has dissected hundreds of crows and found the above named food in their stomachs, but the crow also feeds on the berries of the poison ivy, voiding the seeds broadcast over the land and thus filling it with this, and also other noxious plants. The crow also destroys the eggs and young of many birds, such as the quail, prairie hen, meadow-lark, oriole, and in fact of almost all birds, and by such destruction prevents the hundreds of birds thus destroyed, from doing far more good at clearing up the insects and other pests that prey on the farmer's crops, than the crows themselves can do. After all, is it not easy to answer the question, "Is the crow an injury or a help to man ?"

Many small birds have nests and rear their young in the same copse of brushland where the crows by hundreds resort. Yet I have seen a crow rifle the nest of a meadow-lark that had been exposed by the mowing machines, and the pitiful notes of the mother lark did not save one of her helpless brood from the monster.

Sometimes a crow seems to become a rogue to a much greater extent than is common. One such visited my door yard every day, several years since. It evidently had been shot at, for

one wing had hardly enough feathers with which to fly—indeed the appearance of this crow was disreputable in the extreme. A hen had secreted her nest in the door yard and although we had sought it a number of times, we could not find it. However, the crow came down into the yard one day and found it at once and when I followed to see what he was at, his beak and all his breast were dripping with the eggs he had broken. Neither did he care for the insults heaped upon him by king-birds, grackles, orioles, and other birds, but would proceed deliberately to their nests and rob them. One day I saw him approach the nest of a blue-jay hidden in a cedar tree. In vain was the attacks of a score of grackles and other birds, and when the blue-jay realized that all opposition was in vain, with a heart-broken cry, it abandoned the nest to the marauder.

Every observer of birds has, no doubt, witnessed such scenes, and has been led to entertain a prejudice against the crows, yet Nature is all the time no doubt conserving her forces, restricting what needs restricting, driving some from natural to artificial environments, and man will more often prove his wisdom by letting Nature's work alone, than by trying to rectify her ways with his rough hand.

Warblers of Iowa.

BY MORTON E. PECK, LA PORTE CITY, IOWA.

Paper read before the First Congress of I. O. A.

WITH comparatively few exceptions, the Warbler family embraces our most highly colored species of birds. In size this group is second only to the Sparrow and Finch tribes and its limits are much better defined, though the Terrestrial and Fly-catching Warblers verge closely on the Thrushes, Vireos, and Fly-catchers.

The American Warblers are a distinct family of birds though closely allied to the Old World typical Warblers. But space will not permit a discussion of the affinities of the group.

In spite of the brilliant coloration of the birds and their unique position among the feathered tribe, but few species are popularly known. This is owing to their shy and retiring habits and partially, perhaps, to the fact that during migration, while the great body of them is with us, they are almost entirely silent.

Thirty six species of Warblers

have been known to occur within the limits of the state, though several of these may be considered as stragglers.

In these brief notes I shall attempt little more than merely to touch upon the habits and range of the various species. I shall say little of their breeding as most of them pass the summer beyond our borders.

Mniotilta varia (Black and White Creeper. This is one of the common though far from the most abundant species during the migration season. It breeds throughout the Mississippi valley, though rarely with us. I have never met with its nest though the young, not full-fledged, have been observed repeatedly. It is solitary in habit and may always be observed scouring the branches of large trees like a Brown Creeper. The number of species observable in any locality varies little from season to season.

Protonotaria citera (Prothonotary Warbler). This is one of the rare species, extremely so in the northern half of the state. I have observed it at LaPorte City, which is, I believe, the highest latitude from which it has yet been reported this side of the Mississippi River. It is found almost exclusively in low thickets and swamps. It is said to breed most rarely in the extreme southeastern part of the state.

Helmitherus vermivorus (Worm eating Warbler.) I have never met with this species, though Mr. Lynde Jones informs me in a letter of recent date, that it "is not uncommon during the migrating season". It is a southern species —central Iowa being the northern limit of its range. Of its habits I can say nothing.

Helminthophila pinus (Blue-winged Warbler.) This is a common species, breeding throughout its United States range. It is a beautiful little bird but with a somewhat harsh and rasping voice. It is usually to be met with in open glades and along the borders of woods. The nest is a dainty little structure placed in a low bush or on the ground.

Helminthophila chrysoptera (Blue Golden-winged Warbler). This handsome species is common, though not often observed, on account of its habit of keeping in the tops of the tall trees, where its weak and wheezy song may be heard almost constantly during migration. Dr. Coues says it breeds throughout its United States range, but I have never heard of a nest occurring in the state. If a breeder at all it is very

rare.

Helminthophila ruficapilla Nashville Warbler). Though properly an eastern species, this bird is not uncommon with us during migration. It is a small and obscure species, usually associated with the Orange-crowned. The two may often be observed in large loose flocks, searching for insects amongst the fallen leaves in low open woods.

Helminthophila aestiva (Yellow Warbler). In habits this bird closely resembles the preceding, though in color it is still more dull and obscure and is less common. It is seldom seen among tall trees—living almost entirely on the ground and among brushwood.

Helminthophila peregrina (Tennesse Warbler). This species is one of the most irregular in its migratory habits, sometimes appearing in a locality in countless numbers, then vanishing for several successive seasons. It is the noisiest of all the Warblers during migration. The tree-tops ring with its shrill, monotonous song from morning till night, though the bird itself is seldom seen, for it does not usually appear in great numbers till the leaves are out, when its uniform olive green color effectually conceals it. It is a small species and active, getting its food by darting about amongst the denser foliage near the tops of the trees. It passes far north to breed.

Compsothlypis americana (Blue Yellow-backed Warbler: Parula Warbler). This is the smallest and daintiest of all our Warblers. It is common, though seldom seen in great numbers. It has a curious habit of hovering like a humming-bird about the tips of long branches and seizing small insects. It is the least suspicious of the Warbler family and may often be approached to within a few feet. The peculiar coloring and habits of this species makes it a favorite with ornithologists. In migration it is almost as precarious as the Tennessee.

Dendroica tigrina (Cape May Warbler). Of all our Warblers this species is the most interesting to the ornithologist on account of some remarkable features that it presents. Fifteen years ago the Cape May Warblers were confined almost exclusively to the east side of the Mississippi, and their occurrence on the west side was considered accidental. Now the great body of the species migrate on the west side and still continues a steady advance toward the plains. The

cause of this change is an unsolved problem though probably connected with some variation of food supply. It is one of the largest and most beautiful of the Warblers, richly though not brilliantly colored. Usually found on the ground in swampy places or near stagnant pools.

Dendroica aestiva (Yellow Warbler.) This is the most familiar of the whole group. It breeds abundantly about farm-houses in towns, and in fact in every locality where bushes and small trees are to be found. Its brilliant coloring and lively and quarrelsome disposition makes it very conspicuous. No description of the habits of a species so well known is necessary.

Dendroica cærulescens (Black-throated Blue Warbler.) This can not be considered as one of our common Warblers though in many localities it is far from rare during migration. In appearance it is very striking, differing from all the other members of the family in being all in solid colors, sharply defined. Though dressed in somber tints, it is, with two or three exceptions, our most beautiful Warbler. Nothing can surpass the exquisite effect of the jet black of the throat, verging sharply on the snow white of the under parts and clear deep blue of the upper, together with the beautifully banded tail. It is somewhat slow in its movements and is commonly to be seen on the ground or among the lower branches of trees.

Dendroia coronata (Yellow-rumped Warbler.) Our most abundant species, coming every spring in countless thousands, often before the snow is entirely gone; indeed it has been known to endure a temperature of 20° below zero without apparent inconvenience. It is not strictly insectivorous, but often subsists for a long period upon berries. The habits of the Yellow-rump are too familiar to need discussion. It is an interesting fact that in migration the females usually appear several days before the males. They pass far north to breed.

Dendroica Maculosa. (Magnolia Warbler: Black and Yellow Warbler.) This elegant and and graceful bird is one of the showiest of his kind. They are seldom seen in great numbers, but are very conspicuous on account of their bright coloring, lively movements and habit of keeping among the low branches of trees in orchards and near houses. The range of this bird does not extend

any farther west than Iowa, being considered rare in Kansas and Nebraska. It is a rapid migrant, the whole bulk of the species appearing aud disappearing within two weeks. Its summer home is north of the United States border.

Dendroica cærulea (Cerulean Warbler.) Of all the North American Warblers the Cerulean is unquestionably the most beautiful. It is in reality quite a common species during migrations, and by no means a rare summer resident, but its extreme shyness and habit of keeping exclusively in the tops of the tallest trees prevent it from being often observed, but its sharp, monoto nous song may be heard almost constantly during the whole summer. The nest is a very small structure placed among the slender upper branches of some tall tree in the open woods, and is rarely to be found. Though, as Dr. Coues says, the Cerulean Warbler has no warm colors, none of the gaudier species can compare with this in the exquisite azure blue of the back, bordering the snowy white of the under parts, the narrow collar of deep, blue-black spots and the very long and beautifully banded tail. It is a small species and extremely active and restless. The spots on the breast cause it to be frequently mistaken for the female of the Black-polled Warbler.

Dendroica pensylvanica (Chestnut-sided Warbler). A common and well known species, very dainty and debonnaire. The prevailing color is unusually light, which makes it quite conspicuous. It is most frequently observed among small trees and bushes, along the borders of woods and about houses. Breedsquite commonly in many localities in the state, though the main body of the species passes northward. It is much more abundant in eastern than in western Iowa, and is quite rare west of our borders.

Dendroica castanea (Bay-breasted Warbler). This curiously marked Warbler is one of the less common species. It is frequently seen in company with the Cape May and closely resembles the latter in its habits as well as in general color. Its western range is about the same as the Chestnut-sided, though it does not breed within our borders.

Dendroica striata (Black-poll Warbler). One of the very common birds of this family. It is the last to migrate, often lingering in our woods till the last days of May or even far into June. No other Warbler has so extreme a

range of migration: its limits are the equator and the Arctic ocean. Economically the Black-poll is the most important of the family. It arrives just when the trees are swarming with destructive larvæ, and its usefulness in destroying these can scarcely be overestimated. It is a large and not very active species, and extremely plain in dress.

Dendroica blackburniæ (Blackburnian Warbler). The most richly colored of our birds of this family. The brilliant orange of the breast resembles a flame of fire darting among the trees. A very active bird, choosing the upper branches of tall trees and seldom seen outside of the woods. Common with us, though not abundant, growing scarcer westward and hardly found at all in Kansas and Nebraska. A general favorite with ornithologists on account of its high coloring.

Dendroica virens (Black-throated Green Warbler). This is a most curiously marked species. The entire throat and upper breast is jet black, with a black stripe running down each side; belly, pure white; cheeks, bright yellow; back, bright, rich green, with black stripes. It is usually abundant during migration, though rather shy, and its somewhat harsh, shrill song may be heard incessantly.

Dendroica vigorsii (Pine Creeping Warbler. One of our less common Warblers. It is a hardy species, coming early in the spring and wintering chiefly in the U. S. It is said to breed throughout its range, but no nests from Iowa have been yet reported. A large, stout Warbler, slow of motion, and usually seen creeping about the bodies of large trees.

Dendroica palmarum (Redpoll Warbler). This plainly clad bird is very abundant with us and very characteristic in its habits. It is easily recognized by a peculiar up-and-down movement of the tail resembling that of the Water Thrushes. During migration large numbers of Redpolls are frequently seen on the mud about ponds and watercourses, creeping among driftwood or hovering over the water after insects. They migrate early and pass to the far north to breed.

Dendroica discolor (Prairie Warbler. But a single specimen of this species has been known to occur: this was taken at West Liberty. It is a southern and eastern bird and must be considered accidental with us. I have never seen a specimen and can

give no description of its habits.

Seiurus aurocapillus (Golden-crowned Thrush: Oven Bird). The terrestrial Warblers differ widely in appearance and habits from the rest of the family. The Oven Bird is the most familiar species of the genus. It is abundant with us during the migration, and a common summer resident in many localities. Breeds in dense hilly woods. The appearance of the nest, from which the bird takes its name, and the bird's habit of feigning a broken wing when startled from the eggs, are well known to every ornithologist.

Seiurus noveboracensis (Grinnell's Water Thrush). An abundant migrant and quite common during the breeding season. Nearly always found in dense woods near water-courses and ravines. The peculiar see-saw movement of the tail gives it a very odd appearance. The nest is placed under a small, projecting trunk, on a mass of roots or drift. A shy, solitary bird, preferring the lonliest localities, which it enlivens with its loud, rapid song.

Seiurus motacilla (Louisiana Water Thrush). Closely resembles the latter in appearance and habits. A southern bird, not common with us, seldom passing beyond the southern half of the state. The two Water Thrushes are so nearly alike as to be often confused.

Geothlypis formosa (Kentucky Warbler). This is a southern bird, coming but rarely over our border. In a recent letter to me Mr. Lynde Jones says: "The Kentucky Warbler was taken at Burlington, on May 11, 1884, by Dr. F. Knitham and Prof. C. J. Reed. I can find no other authentic record for the state." I have taken a specimen, however, at LaPorte City, and this is, I believe, the most northerly point it has been known to occur this side of the Mississippi. It is a large, handsome Warbler, somewhat resembling the Maryland Yellow-throat in marking, though much larger and not so sprightly in its movements. It is usually found in swamps and among dense underbrush.

Geothlypis agiler (Connecticut Warbler.) I have included this species in my list of Iowa Warblers, for, though I have no absolutely authentic record of its occurrence in the state, it undoubtedly crosses our borders during migration, as we are on the direct line of its route. The ornithologist above quoted furnishes me with a doubtful record, and I myself once observed a

large, dull-colored Warbler which probably belongs to this species, but which I failed to secure. It is considered one of the rarest Warblers of the Mississippi valley. A marked peculiarity of this species is the fact that it migrates northward through the Mississippi valley and southward by way of New England. In habits it resembles the last species.

Geothlypis philadelphia (Mourning Warbler). This is one of our less common birds of this family, though not usually considered rare. It is extremely shy and retiring and is generally to be looked for late in the season among underbrush and along ravines. The remarkable coloring, from which it derives its name, makes it easily recognizable. Its movements are active and restless and it may often be seen darting in and out among heaps of driftwood, like a wren.

Geothlypis trichas occidentalis (Western Maryland Yellowthroat). The habits and appearance of this bird are too familiar to all ornithologists to need description. It breeds abundantly in our meadows and marshes and its dainty nest and curiously marked eggs are all well known to every collector. Its habits resemble those of the preceding, though it is usually found among tall grass and along the borders of woods.

Ictera virens (Yellow-breasted Chat.) Our largest Warbler. A handsome bird, though rarely seen on account of its extreme shyness. Almost persistent songster, beginning his endlessly varied strain at about two in the morning and continuing without intermission till dark. The song consists of the most odd and whimsical jumble of chattering, whistling and gurgling noises ever produced by any bird, with many notes of rare sweetness. The reputation of the Chat as a ventriloquist is well established. The species breeds plentifully throughout the state, wherever a suitable place can be found. Nearly every gooseberry or hazel thicket or growth of young shoots where a piece of young timber has been cut off, affords a nesting place for one or two pairs. The nest is large and conspicuous and a great favorite with the Cow Birds.

Sylvania Mitrata. (Hooded Warbler). This handsome Warbler is one of the rarest that enters the state. I have observed it once at LaPorte City, which is the most northerly record of its

occurrence which I can find west of the Mississippi. It can not be considered as an accidental visitor, however, as it has been reported from a number of localities. The species may be recognized at a great distance by the opening and closing of the fan-like tail. Of its habits I can say nothing from observation.

Sylvania Pusilla (Wilson's Warbler: Black-capped Yellow Warbler). The most widely distributed of all our Warblers. It is found throughout the whole of the U.S. A neat, shy, little bird common in the migrating season. Usually met with among thickets and along the edges of woods. Its diminutive size and retiring habits make it inconspicuous.

Sylvania canadensis (Canada Warbler). This beautiful bird does not occur abundantly with us, though it is not uncommon. It is properly an eastern bird, Iowa being the western limit of its range. It prefers the deep woods and large trees, where its presence is made known by its shrill and rapid song, without which it would be seldom observed.

Setophaga ruticilla (American Redstart). Little need be said of a bird which, if not at present, was a few years ago the most abundant summer resident of our forests. Not an acre of wood-land could be found on which there were not two or three nests and often twice that number. The Redstart is of a very unsuspicious nature, and the observer may study his graceful movements and beautiful plumage without inconvenience. The nest is a small and compact structure, usually placed on a limb of a small sapling or among the drooping branches of an elm.

This closes the list of Warblers so far as known. Others may occasionally occur within the state, but I can find no record of them.

Their peculiar habits, their gorgeous coloring, their great economic importance, and the rareness of many species make this family one of the most interesting to the ornithologist. Much remains to be learned, however, regarding them, and it is hoped that these brief notes may serve to incite some of our students of bird-life to a closer observation of so large and important a group.

The Red-tailed Hawk (Butes borealis).

BY CARL FRITZ HENNING, BOONE, IA.

IT IS the middle of March. The return of sunny days finds me on my way to my favorite collect-

ing grounds, "The Ledges".

Our robins have been with us a month—the blue-birds nearly as long. The migratory birds have been moving continually since the latter part of February, the first robin being reported Feb. 18, 1894.

Trees and shrubs are budding, the blue-birds, the harbingers of spring, are warbling everywhere. Going south from the city, we pass the home of the Hon. Chas. Aldrich. It seems that the birds know that their friend and protector lives here for we see many robins and blue birds by the house. The shrubbery along the ravine south of the Aldrich home is full of noisy tree sparrows, the welcome notes of the meadow and prairie horned larks come from yonder prairie and ploughed field.

Look across yonder field—can you see the meadow-lark with his rich markings of golden-yellow and black—he is fat and plump enjoying to be with us once more after his sojourn in the sunny south. As we near the woods his sweet and melodious notes come to us with the breeze. At this time of the year the larks are more shy than during the summer months.

By 10 o'clock my friend and I reached the southeast edge of the timber. Here we concluded to eat our lunch before going into the heavy part of the woods.

Luncheon over, we start down Pea's Branch, a pretty stream of water which passes through the Ledges and empties into the Des Moines river. The scenery along this tiny stream is romantic. The huge rocks and bluffs of sandstone are the ledges proper. Here is the favorite nesting place of the Red-tailed Hawk.

Old trees contain the treasures of the Bubo.

That the Red-tail Hawks have not been idle during the few weeks of good weather, is proved by the new nest in a basswood tree across the ravine. Nests of last year had been added to and improved. Coming to an old nest that looked promising, my friend said to me, "There is the nest we are looking for." Three Red-tails circling in the vicinity looked favorable indeed. My friend had no more than stared to climb the tree until the hawks were upon the scene of action—screaming and circling around the nest, which I have no doubt was theirs—the two most concerned being a male and a female. Reaching the nest, my friend reported it empty. We found several

other nests of this species, but all with the same result.

Crossing Pea's Branch which is still frozen over in places, we go in a southerly direction and soon came to the DesMoines river—here the ice has all disappeared. Large flocks of crows, several chickadees and downies were observed, finding no hawk's nest here we retraced our steps until we came to a fork of Pea's Branch. Seeing a large, bulky nest in the very top of a forest monarch, we decide to follow the fork. This fork of Pea's Branch passes through a wilder and more romantic part than Pea's Branch proper. Rocks of all descriptions and sizes are scattered along its banks in wild confusion. The heavy timber on either side—the steep ravines — the sparkling springs flowing over solid rock, all add to the scene of beauty. Nests there were in plenty, but we had evidently come ahead of time, as none contained eggs. We decided to return the latter part of the month. After shooting two fox squirrels, we wended our way homeward.

The first of April I am again at the home of the Red-tail Buzzard. But what a change has taken place during this short time! Only four days ago a second winter seemed to have come to stay. Snowing all afternoon, the next morning it had turned into a regular blizzard, snowing all day. Ducks and geese returned south; black-birds continued moving south for several days. Swans become bewildered and many were shot. Ponds and lakes were again frozen over. A hunting party that had gone to Clear Lake the first of the week, returned with over a hundred ducks: teal, shovellers, butterball, red-heads, mallards, pintail and scaup ducks.

To-day it is clear and warm—an ideal day of returning spring.

The sand-hill crane is circling 'round and 'round—going higher each time—their bluish-gray bodies and wings glistening in the sunshine at each turn. Soon the leader decides on the direction and starts northward, the others following in wedge shape. Lingering snow drifts along the sides of the ravines give back the uncloud-rays of the morning sun. The chicadees are noisy, lively and busy—gleaning their food—what pretty little black-capped beauties they are! In the brush, many fox sparrows are flitting from branch to branch. A song sparrow startled at our approach glides swiftly through the brush

low along the ground. The cheerful notes of the phœbe are heard at intervals. At noontime we arrive at the hawk's nest that looked so promising two weeks ago. Sure enough, the hawk is on. The male Red-tail has been on lookout duty. At our approach he slowly sails across the ravine to the opposite side of the ledges, and there remains perched on the very top of a large tree, from which point of view he can keep his ever watchful eye on our party. I could not help but admire the pretty red of his tail as he slowly passed me. The female bird left her nest and flew in an opposite direction from the one taken by her mate. Disappearing from view, she did not return until we had attempted to climb up to the nest. The nest was placed in a large basswood about fifty feet from the ground—was bulky in stucture—about the size of a bushel basket and composed of sticks and twigs, mixed with grasses and moss. The great circumference of the tree made it very difficult to reach the nest. Having the whole day before us Harry took it easy until he came to the Red-tail's eyrie. When he held up one egg and shouted that there were two more, I went wild with joy. No one but a true oologist can appreciate the sensations of a successful find.

During the taking of eggs, both hawks circled above the nest, at times coming very close, uttering harsh cries—those of the female were even pathetic.

The eggs were brought down safely and admired by all of us. Having securely packed them in my collecting bag, we started for the river by way of the Ledges. Near the river, in a red oak, we took a set of crow's eggs. From here we went to Crow's Point—there obtaining a splendid view for miles around—the river curling in and out—shining like silver in the sunlight.

Crows, red-tail hawks and buzzards congregate at this point in large numbers. The farmers living in the edge of the woods keep up a constant warfare against the Red-tail. Even the woodsman who has a few old hens does not spare this noble bird for fear that the "hen-hawk" will carry off his small flock of poultry. His boys delight in climbing the forest giants to destroy the eggs. If the nest contains young they are thrown out of their lofty home, where only a few minutes before they were greedily devouring a field mouse

that the mother bird had caught, perhaps from the very farm yard of one of these boys. The Red-tailed Hawk renders valuable service to the farmer and should not in return for its good work be killed at every opportunity—just because it occasionally carries off a chicken from the poultry yard. They are merely taking part pay for valuable services rendered.

In regard to the food and usefulness of this Hawk, I can not do better than quote from bulletin No. 3, U. S. Department of Agriculture:

"Of 562 stomachs examined by the author, 54 contained poultry or game birds; 51, other birds; 273, mice; 131, other mammals; 37, batrachians and reptiles; 47, insects; 8, crawfish; 13, offal; and 89 were empty. It has been demonstrated by careful stomach examination that poultry and game birds do not constitute more than ten per cent of the food of this Hawk; and that all the other beneficial animals preyed upon, including snakes, will not increase the proportion to fifteen per cent. Thus the balance in favor of the Hawk is at least 85 per cent, made up largely of various species of injurious rodents, a fact that every thoughtful farmer should remember.

"It is not to be denied that a good deal of poultry is destroyed by this Hawk, but the damage done is usually among the less vigorous fowls in the late fall, and in view of the great number of injurious rodents, as well as other noxious animals which this Hawk destroys, it should seem equivalent to a misdemeanor to kill one, except in the act of carrying off poultry. The fact that there are robbers among Hawks, is no sound argument for exterminating any and every one." —The Hawks and Owls of the United States in Their Relation to Agriculture, by A. K. Fisher, M.D., p. 50.

The eggs of the Red-tailed Buzzard are laid during the latter part of March and all of April. The handsome set of three collected on this day, are as follows in size and color: 2.27x1.81. Ground color, bluish white; heavily blotched and splashed with different shades of red and brown; several dots of dark reddish brown. 2.15x1.78. Handsome egg, marked nicely with cinnamon red splashes and blotched all over. 2.18x1.83. Very light, fine dots of red, but only few; also couple blotches and several greenish shell markings.

The other sets of this hawk in

my collection, were collected April 5th, 1891; two eggs in set. Nest large and bulky, 60 feet from ground. Another nest found this day, contained two young and the remains of a young rabbit.

April 23d; three eggs in set. 2.22x1.81. Bluish white; heavily spotted and blotched with brown and amber over the entire egg—heaviest on larger end. 2.25x 1.85. Few markings and dots of light brown on small end, heavily marked with brown and umber on larger end. 2.16x1.81. Very light. Blotched over entire egg with light shade of brown. Nest bulky, placed in basswood, forty-nine feet from ground.

The Sparrow Hawk.

BY "FALCO SPARVERIUS".

AS I AM to pose before the public, (see frontispiece) in this number of the Iowa Ornithologist, a few words from my personage might be in order. You will note from the cut that age is is beginning to leave its marks upon me. The little rodent that I hold in my talons is an overgrown White-footed Mouse. The weather, for a few days prior to the taking of my picture, had been extremely oppressive and hunger had begun to leave its pangs. It may be that accounts for the stern glare of mine eye and the great expansion of tail feathers.

As I look back over my past life and think of the many annual homes my mate and I have had, it behooves me to say that only once have my earthly possessions been molested by my larger bretheren—man: so it is with impunity and without animosity that I pen these lines for the good of humanity. From the beginning until now I have spent the summer months in southern Iowa, here finding the habitation to rear my young. In the early part of June, 1890 or '91—on account of the imperfection of my memory I can not give the exact date—when my mate was out after his breakfast, I was sitting on our four beautiful eggs, when suddenly I heard a rap on the tree. I listened, and heard it again. Although our home was 65 feet from the ground in a last year's Golden-winged Woodpecker's nest, I trembled as my sect are wont to do on such occasions. Hearing the noise repeated, I slipped out of the hole and took flight. Finding Mr. H., I told him the story and we returned only to find the enthusiast

striving to surmount the trunk of the oak. Perching ourselves near by, we watched proceedings. Mr. H. said it was impossible for us to stay the hand of this vertebrate. After several hours of arduous labor he reached our abode and mercilessly took all the eggs. When he regained terra firma, he said, "These are the first eggs of this speeies I have ever found, but I tell you I wouldn't take another climb like that for fifty like them", so we felt pretty sure that he wouldn't be back again that year; therefore after a few days of mourning, another set of eggs was laid in the same hole and in a fortnight four young birds were hatched, which are to-day mature specimens. It was not so bad after all, for the collector got a set of eggs and we raised a brood too. We can stand it for scientific men to take our eggs for scientific purposes and even to take our lives, when our skins will be preserved in some collection as a monument to our memory for untold ages; but when the small boy and city marksman come along seeking whom they may devour, after they have had what they call the pleasure of killing us, we are left for the beasts of the field and bugs of the earth to prey upon our carcass: such wanton destruction as that is what we condemn. The Iowa ornithologists are trying to have a law enforced that will suppress those who shoot only to bloody the bullet, hence we esteem them as our best friends.

Of Historical Interest.

A. I. JOHNSON, DES MOINES, IOWA.

HON. J. F. Duncombe of Ft. Dodge, Iowa, had in his park on the evening of Dec. 4th, a herd of thirteen deer of the short tailed variety, (Cariacus leucurus). Missing two of the principal and most lordly monarchs of the herd, the following morning, an investigation took place; when lo! and behold, they were found with antlers tightly locked and both dead.

That a fierce and protracted fight had taken place, was plainly to be seen two days later, when the writer of this arrived there to secure both of the bucks for the State Historical Department here in DesMoines, they having been presented to that department by Hon. J. F. Duncombe.

It was commonly supposed that they had broken each other's necks, but upon dissecting they were found perfectly sound and

no bones broken, except the nose of one.

Both being of the same age and about the same weight, neither had any advantage over the other, and it was a battle often read about, but seldom has it happened that both participants could be procured to substantiate the facts of such an event having occurred.

They were one mass of bruizes —hardly a spot as large as a person's hand but what was bruized and several places badly gored and it was plainly to be seen that death was caused by internal bleeding and exhaustion. That the battle was fierce, is plainly substantiated by the results. That two perfectly healthy bucks should kill each other in one night is sufficient evidence to convince the most skeptical.

The Historical Department is very lucky to secure so rich a prize, and duly appreciates it.

Urinator arcticus in Jackson Co.

J. GIDDINGS, SABULA, IOWA.

On November 15, 1895, a male Black-throated Loon was shot while swimming in the Mississippi river, a little way from the shore opposite the town of Sabula by Mr. W. Eldridge, who presented me with a specimen. Being doubtful of the identification of it, I sent the specimen to Dr. C. Hart Merriam, chief of division of ornithology at Washington and he identified it as above.

I believe this to be a very rare species in our state, especially half way across it as thfs specimen was.

[This is the first time this species has been reported from Iowa. —Ed.]

A Reverie.

BY J. R. BONWELL, NEBRASKA CITY, NEB.

I'm a dreamin', just a dreamin',
Of the winter that is done;
Of the old nests and the Owl's eggs,
And the other treasures won.

I'm a thinkin', just a thinkin',
Of the many months to come;
Of the wet and soggy weather,
And the new nests just begun.

I'm a watchin', just a watchin',
All the birds a flying past;
The flocks of Geese and Blackbirds,
And the Ducks that go so fast.

I'm a waitin', just a waitin',
For the flowery month o' May,
With its blossoms and its sweetness,
And the birds who've come to stay.

I'm a countin', just a countin',
On the happy times in spring,
When the birds are all a nestin',
And the woods with music ring.

—From "The Nidologist."

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The Blue-bird, a Vision of Spring.

BY LOTTO WILDWOOD, M. D., DUBUQUE, IA.

He is perched on an elm near my window—
I hear his notes tender and clear—
And he's singing the same song, verbatim,
That he sung in that old tree last year.

I admire his bright coat, for its color
Is of the dear Union blue;
And I know that he advocates freedom,
And never a heart beat more true.

Most gladly we welcome thy presence,
O, thou of the dainty blue wing!
For dost not thou herald the coming
Of all that is lovely in spring?

Because thou art here with thy carol
We know the grim winter is past;
And thou art one out of many
That has stood the cold turbulent blast.

Foreshadowed in vision of beauty
Where rife the commingl'd perfume,
I see the white stream through the meadow
With borders of pink and blue bloom.

And I sit 'neath the shadowy maple,
And list to its young, trembling leaves,
While I mark the swift flight of the swallow
And count their nests under the eaves.

And I see the green slope by the orchard,
All sprinkled with dandelion flowers;
And the bloom of the apple and cherry
Sweep down in pale, fairy-like showers.

And I roam all alone through the wildwood
Where waveth the emerald pine;
And the red squirrel stops in its gambol
To hide 'mid the dark ivy vine.

There are plats of bright moss in the border
With tints of blue violets 'round—
And I gather again for the rock-work,
And mantle anew the steep mound.

And I hear the sweet concert of black-birds
And the trill of the blythe little wren,
And the silvery warbling of orioles
Adown in the buttercup glen.

Most gladly we welcome thy presence,
O, thou of the dainty blue wing!
For dost thou not herald the coming
Of all that is lovely in spring?

The Rambler Noticed

The first Blue-bird for 1896, on the 23d of February and that they are now about as plentiful as they were in the days of long ago.

That Carl Fritz Henning was out in the woods near Boone, Ia., and collected a Great Horned Owl and two eggs. He says, "How is that for an early record?"

That in the March "Oologist", there was an article on "The Finding of Owls' Nests", from the pen of a Hawkeye collector.

That the Ducks are very scarce this spring along the small streams. Possibly they are mi-

grating in greater abundance along the larger streams and lakes. How about it, boys ?

That the Red-tailed Hawks are nesting early in VanBuren Co., Iowa, as Walter G. Savage found a nest on the 15th of March —and upon investigation found that it contained three eggs.

That the Iowa Ornithologist has more subscribers in New York than in any other state in the union. Three cheers for the Empire bretheren !

That the committee to prepare a List of Iowa Birds, has commenced work. Chas. R. Keyes at Blairstown, Ia., wants every one of the members of the I. O. A., whether rich or poor, high or low, wise or other wise, to send to him by May 31st, a check-list of all the birds they have found in the state. Let us surprise Bro. Keyes and have the lists in before that time. Wonder what he'd think ?

That the "Rambler" has written more than he anticipated when he took up his pencil; so he must subside, for fear he will not be allowed to come again.

The Red-shafted Flicker (Colaptes cafer) in Central Iowa.

BY CARL FRITZ HENNING, BOONE, IA.

On the last day in '95, my friend Cal Brown brought in a fine specimen of the Red-shafted Flicker (Colaptes cafer). It was a male in beautiful plumage. My friend saw only two of these rare birds. They were feeding on the ground in the edge of the woods south of his home, Dec. 29, 1895.

The specimen that is now in my collection measures as follows: Length, 12.30; extent, 20.40; wing, 6.25; tail, 4.75; bill, 1.50. The back, rump and upper surface as in C. auratus (Golden-winged), but a different shade of color, a faintly reddish replacing the olivaceous tinge of the ground color. Wings and tail of the same pattern, but the auration replaced by rubefaction. Top of head rufous (like the throat of auratus); no occipital; red crescent; throat and sides of head and neck clear ash, scarlet maxillary patches; a black pectoral semilune. Under parts, very pale lilac brown; fading to whitish on the body, marked with numerous round, black spots. Bill, blackish slate; feet, dark plumbeous. Iris, brown. Western North America, mostly replacing the Yellow Flicker from the Rocky Mts. to the Pacific; Sitka into Mexico. In habits a perfect counterpart of the common Flicker.—Coues, page 493. I have made a drawing of this specimen for my book, "Notes on the Birds of Boone County". This is the only record that I have of Colaptes cafer ever occurring in Iowa excepting one specimen of the species which is at the Ames Agricultural College and bears the date, Ames, Iowa, Dec. 5, 1878.

Does any member of the I. O. A. know of its being taken elsewhere in central Iowa ?

New Books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor, who will examine them personally and give them due consideration.

"Eggs of Native Pennsylvania Birds." This pamphlet is based on a World's Fair collection of birds eggs which were exhibited at the Great Exposition by the author. It briefly states the physical features of the state and outlines the various life-zones which affect the distribution of the birds of Pennsylvania. Following this we find a list of the collection, which embraces 140 varieties, also giving the number of eggs in each set and the dates on which they were taken. A portrait of the author forms a fitting frontispiece to the title volume. Further along there are two full page plates of groups of eggs in this collection.

"Heads," or "Olombia in the Wilderness. Aside from the religious views—which of course we cannot give space to review in a magazine of this kind—this book is very interesting. It relates in a very fascinating manner the experience of a summer spent in the wilder sections of the Adirondac Mountains. A party of tourists, accompanied by two guides, take excursions through unbroken forests and over beautiful lakes. They have many thrilling adventures and experiences. The author has a very charming style of presenting details of camp life and travel, description of scenery and incidents.

It is a work full of illustrative purpose, and all lovers of nature will thoroughly enjoy its pages.

PUBLICATIONS RECEIVED.

Jacobs, J. Warren, "Eggs of Native Pensylvania Birds." A World's Fair Collection. Pp. 1-10, pl. 2.

Schaeter, Theodore William, "Electric Light Bug or Belostoma." Reprinted from the Medical Index. Pp. 1-3, pl. 1.

VonSwartwant, Janet, "Heads, or in the Wilderness", Pp. 1-163. Illustrated. New York: Columbia Publishing Co.

Field Sports. Vol. 10, Nos. 9-22, Jan. 4-Mar. 28, 1896.

Game and Shooting, Vol. 1, No. 12, Feby., 1896.

Gameland, Vol. 8, Nos. 2-4, Jan.-Mar., 1896.

Le Naturaliste Canadien, Vol. 23, Nos. 1-3, Jan.-March, 1896.

Nidologist, Vol. 3, Nos. 5-7, Jan.-March, 1896.

Oologist, Vol. 13, 1-3, Jan.-Mar.'96.

Oregon Naturalist, Vol. 3, Nos. 1-3, Jan.-March, 1896.

Rod, Gun, and Kennel, Vol. 6, Nos. 8-13, Jan. 11-March 21, 1896.

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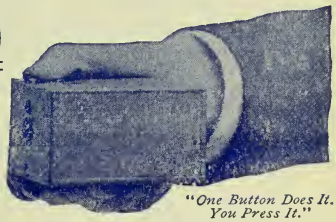

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FOR EXCHANGE OR SALE—1 Gordon Setter Dog, $15.00; a Hunter loading machine for 10 or 12 gauge, $15.00. Want skins of Game birds of U. S, or offers. A. I. Johnson, Taxidermist, 406 E. 5th st., DesMoines, Iowa.

NOTICE—I want every Oologist who is over 10 years of age to send me a 2 c stamp for particulars regarding "The Oologists Association," The Association is a much needed organization to earnest, active and honest oologists. Isador S. Trostler, 4246 Farnam St., Omaha, Neb.

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Wanted—"Bird Nesting in Northwest Canada" by Raine. Will give Davies' "Nests and Eggs" and some cash, if in good condition, J. H. Brown, Iowa City, Ia.

TO EXCHANGE—I have English bird's eggs to exchange for U. S. eggs. Send me your list and exchange prices. K. L. Skinner, Brackenhurst, Swanley, Kent, England.

WANTED—"Coues' Birds of Colorado Valley," '78. Persons having the same to sell or exchange please write to Carl Fritz Henning, Boone, Ia.

WANTED—Woodpeckers in the meat from all parts of the U. S. I will pay charges and will pay cash for material or give good exchange. The co-operation of members of the I.O.A. is requested. Charles Carter, Fairfield, Iowa.

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The....
Iowa Ornithologist.

Vol. II. No. 4.
October, 1896.

A Quarterly Magazine
devoted to...
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An Open Letter From the President.

Fellow-members of the I. O A., Greeting:

We are now in our third year as an association and the work so far accomplished is exceptionally encouraging.

We have from a very small beginning built up an association of which we are justly proud. No state in the Union has a better. We have received many encouraging letters and good wishes from men in the highest rank of Ornithologists.

Our official organ has been the means of bringing our work and our association into prominence, not only in our own state but throughout the country. Articles have at times been widely copied in the papers of the state. Without our official organ our results could not commence to be of such value to our selves. We have been for the last year engaged in compiling a list of "Iowa Birds" The preliminary lists are in and the compiling under way, and it is hoped to have our preliminary, annotated list ready for distribution and further annotation by the next annual congress.

Our members are to a considerable extent engaged in the study of our state's ava-fauna from an economic stand point, and we are hoping to issue a bulletin on this line of investigation at some time in the near future, that will be of value not only to the agricalturists of our state but to those of the whole Mississippi valley, and which will bring us into prominece in a quarter that will be of immense practical benefit to us.

But right here we have encountered an obstacle which threatens to compel us to abandon much work so finely started. We have not as yet enough members and subscriptions to make our organ self supporting, though we have very near it, and with good earnest work on the part of the 50 active members we now have, from now until Jan. 1st, there is not the slightest doubt but that we can have enough members and subscribers not only to carry us through this year and next, but to give us surplus enough to allow us to realize our ambition and in a year or so to publish the finest list of the birds of Iowa, with their habits, nidification and economic value, that has ever been attempted in this state.

But we need money at once. There are still twenty unpaid dues this year and this would do a good deal toward helping us through the year. These are not unpaid I feel sure through any lack of interest in our Association, for from the fine work done it is to be readily seen that we have but little lack of interest among our numbers, but it is I think simply from neglect and thoughtlessness on the part of these delinquent members. There are still five unpaid pledges on last years deficit.

We are now in a position where it will be absolutely necessary to abandon the publication of our official organ as well as our hopes for the bulletin in preparation, unless we meet with an immediate and hearty response to this petition. To many members there seems but little chance of obtaining new members or subscribers. But do they look in the right places? In a recent letter from our enthusiastic fellow member, C. F. Henning, he says, "I am going to get our professor of the Boone High school interested in us and hope to send you at least ten members Three are now ready for the chairman of the executive committee." Here now is a field for work which but few have tried, and a field which is going to yield the best results in our canvas for new recruits. In a neighboring city I have recently heard of a club of enthusiastic young Ornithologists

(Continued on Third Page Cover.)

The Iowa Ornithologist.

Vol. II. Salem, Iowa, October, 1896. No. 4.

The Prairie Hen (Tympanuchus americanus.)

BY A. I. JOHNSON, DES MOINES.

Paper read before the First Congress of I. O. A.

IT gives me great pleasure to be able to say, that there is in this fair state of Iowa an association of Ornithologists, an association who will be able individually and collectively, to prepare data, and furnish facts relative to our birds which will be a lasting monument of information to the coming generation; and when you take into consideration the rapidity that our birds are becoming extinct, the information that is furnished by so reliable a body as the Iowa association is composed of, you can readily see the importance and benefit arising from such an association. That there is in the great state of Iowa, a bird that was here when the first settler crossed the great Mississippi; and one I can safely say has had no rest from that to the present time; one that has furnished many a hungry man with a good meal, if not being actually the means of saving his life, the greatest bird that inhabits this fair state; one that has no fear of our wintry blasts and has not as yet been conquered by anything except man, his cruelest foe, who persecute him summer and winter, day and night; with dog and gun in summer and all manner of traps in winter, when instead of foes they sadly need friends, our loyal legal Prairie Hen (Tympanuchus americanus).

To enter into a scientific description of this bird I hardly think it necessary, as you are all familiar with its general characteristics.

I will simply state that it belongs to the order Gallinæ and Genus Tympanuchus, and is found now principally west of the great Mississippi, to the Rocky Mountains.

This grand bird was formerly found as far east as the lower New England states, and from there west in certain localities, in about every state.

It has been claimed by some, that the Prairie Hen of the eastern states (or Heath Hen as it was then called) is a different bird than the Prairie Hen of the west, but I think that climate, food and a variety of other things is the main cause of all the changes to be found in size and color. All the other characteristics are the same, the call of the male bird, or bumming noise it makes

wings.

Human life is chiefly concerned with material wants, food clothing, accumulating wealth, and in attaining the applause of the multitude; but to many, if not to most of us, there comes a time when we feel how empty is such a life, how narrow its bounds; like Solomon, we are tempted to say, "vanity of vanities, all is vanity. What profit hath a man of all his labor which he taketh under the sun. One generation passeth away and another generation cometh, but the earth abideth forever. The thing that hath been, it is that which shall be; and that which is done is that which shall be done, and there is no new thing under the sun." Such pessimism is best overcome by going to the birds for philosophy. They are the true optimists. Each returning morning they hail the dawn with a song, as full of gladness as if it had been that first morn when the morning stars sang together. At evening their "lucid notes close the eye of day." To one who loves the birds, the world is never old or worn out; it is always new. Their notes in early spring awaken memories of childhood. In autumn their departure tells of lands of perpetual sunshine. Of those which remain with us through the winter's storms we learn lessons of trust and courage; and so not a day of the entire year, but their ministry is felt in widening the bounds of life; in upholding the skies from falling upon us; in making us more worthy to dwell on this earth.

But we need eyes to see and ears to hear. Not all of us see half the beauty of the birds; nor do we hear a tithe of the woodland harmonies, nor have learned even the most rudimentary lessons that birds have to teach us. We need, not the eyes and ears of the mere naturalist, we need the eyes and ears of the priest of nature. If we are ever to have an American literature we must interpret the lessons of the birds, which we see every day in the woods, meadows, by the watercourses and not the sky larks, linnets, cuckoos, and nightingales that have graced the literature of the old world. The redbreast of England is not our robin; but we must have our robin so interwoven with our life, that it will be all to us, that the redbreast is to the life of England. Our mocking bird is equally as worthy of a laureate as the nightingale of Milton; our meadow lark is as inspiring as Shelley's sky lark, in variety of song, and tenderness of associations with the fields and pastures.

The Acadian Flycatcher in Pottawattamie Co.

BY E. E. IRONS COUNCIL BLUFFS.

Paper read before the Second Congress of I. O. A.

THE Acadian or Small Green-crested Flycatcher was first brought to my notice in the spring of 1891, at which time, two nests of three eggs each were found. Then, for three successive years, although I searched diligently, no sign of the species was to be discovered. In 1895, a number of nests were found and examined, most of which contained eggs. Again in the present year, (1896) I found this Flycatcher to be fairly abundant.

While not a common bird, it is probably of more frequent occurrence than is generally known, and some few notes may prove of interest to members of the I. O. A.

The Acadian Flycatcher is rare in New England, and seems rather to be a bird of the middle portion of the United States, embracing the territory drained by the Mississippi river system. The bird breeds throughout the northern portion of its range, and winters south to Mexico. The name also, Acadian, is not geographically correct, as may be seen from the foregoing habitat.

In form and general coloration it is similar to Traill's Flycatcher but the wing bars are not so light in color, and the under parts contain more of a yellowish tinge. In size the Acadian is somewhat larger than the Traill's but might be easily mistaken for the latter.

Like the Traill's Flycatcher, it is of retiring habits, and is even more seclusive, frequenting dark shady woods, and deep ravines. The thought of this bird, always brings to my mind, recollections of pleasant hours, spent in the moist refreshing coolness of the deep woods, where the dense shade is broken only here and there by a ray of sunshine which has penetrated the thick leafy canopy.

Although generally regarded as a shy bird, on several occasions I have found it to apparently lose its accustomed shyness and flit about from branch to branch within fifteen feet of me, very much after the manner of the Wood Pewee.

With one exception, all the nests I have examined were situated in bushes or small trees on the side near the bottom of a ravine. The bird seems to give the preference to iron-wood saplings, for the reason, I suppose, that the tree affords specially favorable branches for the construction of nests. Two nests however were found in hickory saplings. One of these was in a

tree which had been bent in some way so as to be nearly horizontal in its last ten feet. This nest was nearly 20 feet from the ground. This is the greatest height at which I have found nests of this bird, the usual height being from 4 to 10 feet.

The nesting season begins about the first of June, or possibly a few days earlier, and fresh eggs are to be found from that time until about June 25.

In size and composition the nests are variable, but the general style of architecture remains the same. One of our prominent writers describes the nest as "a light hammock swung between two forks." The body of the nest is formed principally of dry grass stems and catkins, bound together with spider-webs, and adorned with the ever present pendant grasses. One particularly beautiful nest was composed almost entirely of catkins from the oak tree, and was a model of grace and elegance. Generally, however, the neat appearance of the body of the nest is offset by a trimming of long grasses, giving it the appearance, as some one has said, not of a nest, but of the "remainder of a load of hay."

The number of eggs in a set is from 2 to 4, but I have always found 3 eggs to constitute a complete set. In size, they are somewhat larger than those of Traill's Flycatcher, averaging about .73x.53. The ground color is yellowish buff, while the markings are dark brown in color, and generally are distinct in outline, and not blotched as is sometimes the case with the eggs of *trailli*. A series of eggs of *acadicus* does not exhibit a very great variation.

Although the Acadian Flycatcher possesses many points in common with other members of Tyrannidæ, it is a bird of marked individuality and is worthy of careful study.

But it is only one among hundreds of others of our birds, and when we remember that the birds form but a small part of the animate creation, and that the animate creation is only a superstructure, based on the great inanimate, we are led to exclaim, O Nature! how deep is thy mystery!

The Northern Shrike (Lanius borealis) in Jackson Co.

BY H. J. GIDDINGS, SABULA.

THIS bird, a wolf in sheep's clothing, is one of our most attractive winter visitants, being both pleasing to the eye and at times a beautiful singer, I say at times because it seldom favors us with a real song. Early in the

winter it selects for a home a patch of brush, hedge row, or some waste corner where there is a few trees or bushes, where it will frequently spend the most of the winter, and from where its song can occasionally be heard, especially toward spring. The food of this species consists principally of insects, mice and small birds. Of the birds I find the Tree Sparrow to suffer most, in this section, but near towns they destroy quite a number of that pest the English Sparrow, which certainly is to their credit. In my opinion they do not destroy nearly so many birds as is generally supposed. I am led to this belief by having at a great many different times seen them try to catch birds but with a single exception they always failed, and also by the few birds found hung on thorns compared with the number of mice found in the same situation. That they feed quite largely on insects I believe by having seen Shrikes frequently on the ground evidently picking up insects, and once during an unusual warm spell of weather in February I saw one catching some large insects on the wing of which it took twenty-five in the short time that I watched it. These insects appeared to me to be the images of large borers that are found in oak timber, this being in a patch that had been grubbed down and the trees left and not worked up. This species arrives here in the last week of October or first week of November and remains until about the middle of March. I find by a comparison of my notes for the past seven years that the earliest it was seen was Oct. 23, 1890, and the latest was noted Nov. 9, 1895. The latest seen in spring for the seven years was April 3, 1891, which is about the time that the White-rumped Shrike arrives from the south. The two species are often confounded as one and go by the name of Butcher bird, both having the habit of hanging their prey on thorns.

I will give two extracts from my note book as follows:

December 11, 1892.—This morning I surprised two Northern Shrikes fighting over the body of a Tree Sparrow which one of them had killed and hung on a thorn at the bottom of a hedge, six inches from the ground. They were making quite a row and seemed in dead earnest. The sparrow had its brains, and part of the entrails eaten. Having a gun I stopped the fight by killing one of the combatants.

November 26, 1895.—Was driving through a small piece of woods when my attention was attracted by a Tree Sparrow flying close to my face followed by a

Shrike. Wishing to see if the Shrike was successful, I stopped to watch. The sparrow tried to get away from its pursuer by dodging around in the brush but, (to make a long story short) it was of no use, and the Shrike finally caught him behind a pile of wood, and carried it to an open space where he laid his victim down and hovering above it watched until the sparrow tried to escape when he would seize it and after giving it a few pecks let it go again. This was kept up for some time, the Shrike playing with his victim much as a cat does with a mouse, but finally getting tired of this sport he killed it. Upon picking up the sparrow I found that it had been killed by being choked and not by having the brains pecked ont as generally supposed, there not being a mark upon its head.

The Second Congress of the Iowa Ornithological Association.

THE Second Congress of the Iowa Ornithological Association was held in Mt. Vernon, July 29–31, 1896.

BUSINESS MEETING, JULY 29.

2:00 p. m. The meeting was called to order by the President, Charles R. Keyes, with seven members in attendance. The matter of holding one public meeting was informally discussed, finally Thursday evening, July 30, was chosen. After some informal discussions on minor points, the meeting adjourned to meet at 9:00 a. m. July 30, for further business.

SECOND MEETING, JULY 30.

9:00 a. m. The meeting called to order by the President, Chas. R. Keyes. It was decided to postpone the business meeting until tomorrow morning, hoping for the arrival of members who were expected. The meeting then proceeded to the reading of papers. The first paper of the morning was entitled "The Warblers of Jackson Co.," by H. J. Giddings. In the absence of the author it was read by Morton E. Peck. The second paper was "The Acadian Flycatcher," by Ernest Irons, in his absence was read by David L. Savage. The third title "Traill's Flycatcher," by Chas. R. Keyes. Discussions followed each paper, in which all members present took part. The opening paper of the afternoon session was by Morton E. Peck, entitled "Affinities of the Warblers," this was accompanied by a chart drawn by Mr. Peck which showed clearly the relations of the mino tilidæ. The next paper was "Observations on Motothrus ater" by David L. Savage. "The Picidæ" by William Savage was the third paper of the after-

noon. The fourth paper was entitled "Some Peculiar Nests" by Frank H. Shoemaker. An extended discussion followed each paper, also, a comparison of notes on the species under consideration.

PUBLIC SESSION, JULY 30.

8:00 p. m. The meeting called to order by the President, Chas. R. Keyes. After a few explanatory and well timed remarks, the meeting proceeded to the consideration of scientific papers. The first paper entitled "Protection of Birds" by W. W. Loomis, in his absence was read by H. M. McLaughlin. Mr. Chas. R. Keyes gave as the second paper, "The Iowan Raptores." The third title "Birds" (from an æsthetic standpoint) by Hiram Heaton, in the absence of the author was read by B. H. Bailey.

BUSINESS MEETING, JULY 31.

9:00 a. m. The meeting was called to order by the President, Chas. R. Keyes. Eight active members were present. The secretary's report gave the membership of the Association as 71, constituted as follows: Active, 50; Honorary, 3; Associate 18. Then reports were heard from the treasurer and the chairman of committee on compiling of the list of Iowa birds. Moved and seconded that David L. Savage be made chairman of committee on compiling the list of Iowa birds, and that the other members of the committee be continued. Motion carried. The officers elected were J. H. Brown, president; W. W. Loomis, vice-president; B. H. Bailey, secretary; David L. Savage, editor-treasurer; Frank H. Shoemaker, Geo. H. Burge, Carleton R. Ball, members of the executive council; Charles R. Keyes, Carl F. Henning, H. J. Giddings, members of the finance committee. The association then adjourned to meet in Manchester, the third week in August, 1897.

The afternoon was pleasantly spent in viewing the beautiful, life size, water colored paintings of over two hundred of our Iowa birds, made by Mr. William Savage, of Wilsonville, Iowa.

BERT H. BAILEY,
Secretary.

Birds of Iowa.

A complete list, with profuse notes on Iowa birds, is now being prepared under the supervision of the committee appointed by the Ornithological Association.

A check-list of North American birds is sent, with this magazine, to each member of the association and the members are requested to check off the names of the birds they have found in the state, a cross to indicate summer resident and a dash not summer resident. It is important that the members make no delay in filling out the check-lists and sending them to the chairman of the committee.

Committee on Compilation.	DAVID L. SAVAGE, Chairman.
	CHAS. R. KEYES,
	MORTON E. PECK,
	PAUL BARTSCH,
	JOHN V. CRONE,
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A Quarterly Magazine Devoted to the Study of Ornithology and Oology.

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The notice of the taking of a Black-throated Loon near Sabula, Iowa, as given in the April IOWA ORNITHOLOGIST, read, by J. Giddings, but should read H. J. Giddings. One initial was omitted thus crediting the note to the wrong person, there being a J. Giddings at Sabula.

I must also modify my supplementary note on this species, as a specimen taken by Paul Bartsch at Burlington, Iowa, was reported in the proceedings of the Iowa Academy of Sciences, 1895.

Notes and News.

Sept. 12, I received a specimen that is of rare occurrence in Boone county. It is a Swallow-tailed Kite, and was shot by C. H. Elliott, 5½ miles west of Boone, near the Des Moines river, two miles west of Cal Rose Bridge. About ten years ago the Swallow-tailed Kite was common during the migrations, but of late years they have become rare. The bird when killed was in a bass wood tree pruning its feathers.

Length,	24.00
Extent,	49.00
Wing,	16.75
Tail,	14.50
Tarsus,	1.00

Stomach contained five frogs and one grasshopper.

By the way I have some good news for you and you may tell the I. O. boys that they are welcome to the best cigars in town if they call at my store. The glad tidings are that on September 7, a baby girl with blue eyes, black hair, and cheeks as rosy as a peach was born at "Bird's Home." Of course she will be a lover of our birds.—Carl Fitz Henning, Boone, Iowa.

On February 29, I took a fine specimen of the Pileated Woodpecker near this place. On March 7, Mr. H. Thomas took two specimens of the Evening Grosbeak, and again on April 18, he pro-

cured two more specimens of the same species. These birds were in very large flocks. On March 18, I took one specimen of the Bohemian Waxwing from a flock of fifteen or twenty.—C. C. Smith, Winneshiek Co.

Read the open letter from the President of the I. O. A., found on the second page and go to work in earnest for the premiums. They are open to subscribers as well as members. You will need to do some hustling, for Henning has ten members side-tracked now. Don't let him come out head, for with his bonny lassie and a premium, he would have more joys than his share.

I collected a set of fifteen eggs of the Florida Gallinule at Heron Lake, Minn., this year.—Paul C. Woods, Spencer, Ia.

Mr. Wilmon Newell and myself have taken three fine sets of three eggs each of the Red-tailed Hawk from this vicinity this spring.—John V. Crone, Ames, Iowa.

I have taken sets of Great-horned Owl this year on the following dates: February 22, $\frac{1}{3}$ with photo of eggs and nest in situ and also of nest from ground. Feb. 29, $\frac{1}{2}$. March 14, $\frac{1}{2}$ with parent bird. March 23, $\frac{1}{2}$, a second set, so I left it. On March 24, I mounted a male Whistling Swan which was shot at Lake Edwards, Hancock Co. Measurements, Extent, 83 inches, length 50, wing $20\frac{1}{4}$, tail $8\frac{1}{2}$, bill 4.—R. M. Anderson, Forest City, Iowa.

This is an early spring, I have recorded the taking of Meadowlark's eggs the 20th of April, and I took a set of seven May 4, and a set of Cooper's Hawk, May 8. I noted a Bay-breasted Warbler, April 21, the only one I have seen this year.—Paul C. Woods, Spencer, Iowa.

New books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor, who will examine them personally and give them due consideration.

Shoemaker on Birds of Franklin County Iowa, (A partial list of the). This is an annotated list of 150 species, the result of five years observations made at odd times. The annotations relate to the manner of occurrence of the various species. Preceding the annotated list (pp 1-2) Mr. Shoemaker describes the general character and extent of the region treated. It is attractively printed and we trust may prove an incentive to ornithological research in the county of which it treats, as well as a stimulant to other ornithologists in the state to prepare similar lists.

"Warren's Taxidermy." A bulletin published by the state department of agriculture of Pennsylvania and prepared by the zoologist, B. H. Warren. The work is divided into three chapters as follows: (1) 'How to Collect, Skin, Preserve and Mount Birds;' (2) Laws relating Song and Wild Birds;' (3) 'Game and Fish Laws;' The first chapter conveys in a plain way the easiest method of preparing and preserving birds' skins. Commencing with the rudiments of the art, so that any school boy with its aid could learn the process, and further along giving instruction that is of value to the professional taxidermist. This is the second edition of the bulletin. The author states that "the demand for the first edition so far exceeded our expectations that this reprint is necessary to avoid disappointing a great many correspondents of the department." Should not this be an encouragement for other states to publish bulletins of a similar nature?

PUBLICATIONS RECEIVED.

Beal, F. E. L., "The Meadow Lark and the Baltimore Oriole." (Yearbook of the U. S. Dept. of Agriculture for 1895, pp 419-430, pl. 2.)

Judd, D. Sylvester, "Four Common Birds of the Farm and Garden. (Yearbook of the U. S.

Dept. of Agriculture for 1895, pp. 405-418, pl. 4.)

Jones Lynds, "General Notes." Bulletin, Nos. 6, 7,8, Wilson Orn. Chap. Agassiz Assoc., Jan.-Mar.-May 1896

Shoemaker, Frank H., "Birds of Franklin County, Iowa." Pp. 1-16, 1896.

Taylor, H. R., "Standard American Egg Catalogue." A basis for the exchange of birds nests and eggs. Pp. 1-32: 1896.

Warren, B. H., "Taxidermy." Bulletin No. 6, Pa., Dept. of Agriculture, 1896. Pp. 1-128, pl. 9.

Field Sports, Vol. 11, Nos. 1-24.

Game and Shooting, Vol. 2, Nos. 2 7, Apr.-Sept. 1896.

Gameland, Vol. 9, Nos. 1-4, June-Sept. 1896.

Le Naturaliste Canadien, Vol. 23, Nos. 4-9. Apr.-Sept. 1896.

Museum, Vol. 2, Nos. 6-11, Apr.-Sept. 1896.

Nidologist, Vol. 3, Nos. 8-12, Apr.-August 1896.

Oregon Naturalist, Vol. 3, Nos. 4-9, Apr. Sept. 1096.

Osprey, Vol. 1, No. 1, Sept. 1896.

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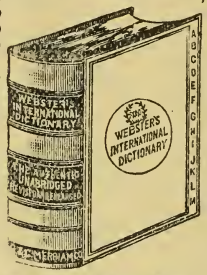

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Of brethren gone to that far distant land
To which we all do pass—gentle and poor,
The gayest and the gravest, all alike—
Then turn into the peaceful woods, and hear
The thrilling music of the forest birds."

—*J. McLellan.*

VOLUME II.

SALEM, IOWA.
DAVID L. SAVAGE, PUBLISHER.
1896.

INDEX TO VOLUME II.

A Revelrie,	Page 73
Acadian Flycatcher in Pottawattamie Co., Ia.	80
American Crow, The	55
Birds,	78
Birds Extinct in Iowa and Those Becoming So,	1
Birds of Iowa,	84
Bird Laws of Iowa and Laws That are Needed,	3
Blue bird, The	74
Book Review,	51, 76
Constitution and By-Laws of the I. O. A.	26
Dick,	19
Downy Woodpecker, The	23
Duck Hawk, The	14
First Congress of the I. O. A.	23
God's Wisdom in Concealing,	20
Heronry, A	14
Historical Interest, Of	72
Members of the I. O. A.	29
Notes and News,	49, 85
Notes on the Traill's Flycatcher in Pottawattamie Co., Ia.	53
Northern Shrike in Jackson Co., Iowa.	81
Notes on Nireonidæ,	40
Publications Received,	52, 76
Prairie Hen, The	77
Protection of Our Birds, The	34
Red-shafted Flicker in Central Iowa, The	75
Red-tailed Hawk, The	66
Second Annual Congress of I. O. A.	83
Sparrow Hawk, The	71
Sea Birds That Visit Iowa,	31
The Rambler Noticed,	74
Urinator arcticus in Jackson Co., Ia.	73
Warblers of Iowa,	58

/orking under an experienced professor and who have made a fine collection of kins of birds of their section, among which are several of very rare occurence ı our state, and these enthusiastic workers have never heard of our work or ur Association Here ought to be a very fruitful missionary field and I hope to ttend one of their meetings soon, if possible. In another nearer city, though ut of our state, I learn the principal of the High school is an enthusiastic Ornihologist, spending the majority of his Saturdays in the fields and woods, and ıany times with pupils of his school. I believe if members will make an effort ı the schools and colleges of our state, that they can accomplish a very great eal there.

In a recent letter to Mr. Savage I suggested that a good means for us to raise ıoney to carry us through the balance of the year, and as a means of stimulatıg the members to greater efforts in the obtaining of new members and subcribers, that the members all send in to the editor-treasurer at once such ınounts as they feel able—these same to be applied to subscriptions and memers fees. Then let all those remitting go to work for the subscriptions and new ıembers sufficient to repay the money so advanced. Three have already signied their willingness to advance $3.00 each on these conditions, all fully believıg that they can easily recover it by Jan. 1st. Others have offered $1.00, and I m sure from the few letters received that the members will awake to the fact hat on their individual efforts will depend the success of our Association.

There are a few of us to whom a chance to add to our collection will not bring ɔrth some effort, and to make the race a lively one I have thought it might be ′ell to make an inducement in the way of small premiums to the ones sending he largest lists of new members or subscribers before Jan. 1st.

To this end I will give to the one sending in the largest list, (one new member ɔ count as two and one-half subscribers) sets of eggs to the value of $5.00, includıg among others a set of Krider's Hawk, ½. To the one sending the second largst list, sets to the value of $3.00, including a set of Swainson's Hawk, ½, and to he next ten largest lists a set each of Black-crowned Night Heror, ½ to ¾, colected on Heron Lake, Minn. the last summer.

Now let us see what a united effort will do for us. We cannot afford to stop ur work here—it has grown too dear to us. With prompt remittances on the art of delinquent members and a hearty response to this appeal on the part of he others, we will be in splendid shape to carry us through next year. Let evry one try to send in enough for the dues of one new member at least and then ıake an earnest effort to get the new member. If you feel you cannot risk even hat, try to carry the burden of one subscription anyway and there will be few ıdeed who cannot get that. Send in your remittances promptly and let us have short item of news for the Iowa Ornithologist with each We always welcome ny news from fellow members. With this great aid we are going to enter the ew year with facilities for fulfilling all our plans and by the close of next year t the latest, we will hope to publish our "Iowa birds" and this will be the beinning of a newer and a larger scope for our work, as it will bring us valuable rnithological bulletins and material and bring us into touch with scientific soieties the world over.

Yours in love for the I. O. A.
J. H. BROWN, Pres.

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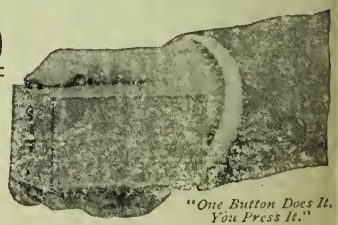

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Iowa Ornithologist

VOL. 3, NO. 1.
JANUARY, 1897.

A QUARTERLY MAGAZINE
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TABLE OF CONTENTS.

The Iowan Raptors, Chas. R. Keyes, Pres. I. O. A., - - - - 1
Observations on the Cowbird, David L. Savage, - - - - - 4
Notes on the Warblers of Jackson County, H. J. Giddings, - - 7
Bob White, Wilmon Newell, - - - - - - - - - 10
An Accidental Visitor, - - - - - - - - 11
The New Year's Work, J. H. Brown, - - - - - 12
Bird Migration in Iowa, Committee on Compilation, - - - 12
Book Review, - - - - - - - - - - 14
Publications, - - - - - - - - - - 14
Members of the I. O. A., January, 1897, - - - - - 15

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Turkey Vulture.
Cathartes aura.

The Iowa Ornithologist.

Vol. III. JANUARY, 1897. No. I.

THE IOWAN RAPTORES.

By CHAS. R. KEYES, President Iowa Ornithological Association.

Paper read before the Second Congress of I. O. A.

THERE seems to be a general opinion prevailing, especially among farmers and sportsmen, that all birds of prey do more harm than good, and are, consequently, worthy of death wherever and whenever one may have an opportunity to inflict it. If this is not the case, then the actions of these classes of men are, in the great majority of cases, opposed to their beliefs. It is seldom indeed that a chance to kill a hawk or an owl is thrown away by the average sportsman or farmer's boy. The experience of the writer, such as it has been, has, as yet, failed to find a farmer who was unwilling to have nests and eggs of these birds taken from his premises. On the contrary, information is gladly given as to the whereabouts of the nests of these species in the hope that a new crop of the "pests" may be avoided. It might be added here, by the way of parenthesis, that the farmer's "benefactor" generally failed to give in return the information that the same pair of birds would, in a few days, have another nest under process of construction in the same or immediate vicinity.

It will be the object of this discussion to try to prove or disprove the value to the farmer of raptorial birds, confining our study for the sake of narrowing down the subject, to the raptorial birds either resident, migratory, or casual to the state of Iowa. It is believed that the following list of thirty species is complete for this purpose, and it will be our object to consider briefly each of these species by itself and try to reach a conclusion as to whether, on the whole, it is a benefit or a detriment to agricultural interests.

The influence of birds of prey on agriculture is in a large per cent of cases indirectly and only to be ascertained by the study of smaller birds, insects and smaller mammals destroyed by them for food purposes. It will, then, be necessary to assume that certain small animals are a benefit to agriculture and that others are obnoxious. This will be allowed without much difficulty. It will, in general, be conceded that our small field birds, as thrushes, sparrows, wrens, warblers, flycatchers, larks, etc., are of direct or indirect benefit to agriculture; and that many, probably most of our small field mammals, as field mice, rats, ground squirrels, gophers, rabbits, shrews, etc., are of direct detriment to it. In our discussion of the merits and demerits of the following species of birds of prey it will be necessary to keep in mind this general destruction.

(1)—*Cathartes aura.* TURKEY VULTURE.

This bird influences agriculture mainly through its office as a scavenger and in this capacity doubtless performs a kindly service in the removal of all sorts of carrion, which remaining, would produce disease both in man and in

beast. This service is so important in some states that the bird has justly been protected by law. The argument has sometimes been brought against it that this bird will eat animals which have died of some disease, as hog cholera, and communicate it to pastures or pens containing healthy animals, and in this way sometimes spread the disease throughout a large community. This argument is not well substantiated, however, and indeed it is doubted whether the disease in question is really infectious. On account of its weak beak and talons this vulture can rarely secure live prey. Its food consists of any dead mammals or fish, eaten when fresh preferably, but when decomposed in cases where the animal's skin is too thick to be torn open when fresh. In very rare instances this bird has been known to kill and eat small lambs. The Turkey Vulture may be classed as common in Iowa.

(2)—*Elanoides forficatus.* SWALLOW-TAILED KITE.

This kite can scarcely be said to be common in Iowa, but occasional pairs ascend the Mississippi each spring and nest in the state during the months of May and June. It is doubtful whether this species ever kills a bird of any kind, but on the contrary it seems to be perfectly harmless and beneficial. Its food consists principally of various kinds of reptiles, beetles, grass-hoppers, crickets, small frogs, worms, lizards and tree toads.

(3)—*Ictinia mississippiensis.* MISSISSIPPI KITE.

The distribution of this bird is very irregular outside of the Southern Mississippi region and the Gulf States. It may be accounted only as casual or irregular to Iowa. Like the Swallow-tailed species, its food consists of insects, small snakes, lizards and small rodents. It is not known to destroy birds, at least not habitually.

(4)—*Circus hudsonius.* MARSH HAWK.

The Marsh Hawk or Hen Warrior so called, is a common summer resident in Iowa, breeding on the ground in meadow or timber lands during May and June. The bird has been thought to be destructive to wild birds and the farmers' fowls, but observation does not show this supposition to be generally true. It passes most of its time in the fields and low timber, watching for food gophers, meadow mice, ground squirrels, and other small rodents, locusts, grass-hoppers, frogs and in some localities the large destructive crickets (*Anabus simplex*). From an economic standpoint this species is certainly beneficial, and instead of persecution should have protection,

(5)—*Accipiter velox.* SHARP-SHINNED HAWK.

This little hawk is a fairly common and regular summer resident in Iowa, and is one of the species which must be considered as doing more harm than good. It seldom eats small rodents and insects, but on the contrary it lives mostly on small birds, sometimes, however, destroying birds as large as itself such as pigeons, Bob Whites, mourning doves, robins, etc. It is said not to hesitate to help itself to young chickens whenever it can find any.

(*6*)—*Accipiter cooperii.* COOPER'S HAWK.

COOPER'S HAWK is a common summer resident in Iowa and in appearance (being, however, larger) and in disposition is much like the preceding species. From its far greater numbers, it is even more destructive. This hawk is the worst enemy of the smaller birds generally, and probably does more than all the other hawks combined to reduce the size of the farmers' flock of poultry. It does not appear to destroy reptiles, rodents or insects to any great extent.

(*7*)—*Buteo borealis.* RED-TAILED HAWK.

THIS is probably the most common hawk in Iowa and is resident here throughout the year. It is commonly called the "Hen Hawk" though this is a misnomer, for the bird very seldom visits the poultry yard. It only receives a great deal of blame which should attach to the preceding species. Its food consists for the most part of gophers, ground squirrels, moles, meadow mice, shrews, rabbits, frogs, toads, crawfish, snakes, lizards and various kinds of insects. The remains of small rodents may always be found in this bird's nest containing young. The Red-tailed Hawk deserves protection rather than having a price set upon its head as has been the case in some states.

(*8*)—*Buteo borealis kriderii.* KRIDER'S HAWK.

THIS species is only a geographical variety of Buteo borealis, a lighter colored race, which is rare in Iowa. Its habits, disposition, and food, so far as known, are identical with the red-tailed species.

(*9*)—*Buteo borealis calurus.* WESTERN RED-TAIL.

THIS species is also a geographical variety of Buteo borealis, and is a dusky or darker colored bird, which is casual to Iowa. Its habits, food and disposition are essentially the same as those of the Red-tailed Hawk. Where prairie dogs, grass-hoppers, and rattlesnakes are found, it is known to make them a part of its fare.

(*10*)—*Buteo borealis harlani.* HARLAN'S HAWK.

HARLAN'S HAWK, another variety of Buteo borealis, is the darkest colored of this species and only casually reaches Iowa from the South Mississippi region. It is not a well known bird, but it seems to differ from the Red-tailed Hawk only in color and in a somewhat more shy disposition.

(*11*)—*Buteo lineatus.* RED-SHOULDERED HAWK.

THE Red-shouldered Hawk is a common species in Iowa though seldom seen from its habit of keeping itself well out of view in the timber along bottom lands. Its food is of the most humble kind, and is such as will show beyond doubt that the bird is an economic benefit. Dr. C. Hart Merriam, of the Division of Economic Ornithology and Mammalogy, U. S. Department of Agriculture, examined 102 stomachs of the Red-shouldered Hawk during 1887, and found the contents to be as follows: 1 contained poultry; 5, other birds; 61, mice; 20, other mammals; 15, reptiles or batrachians; 40, insects; 7,

spiders; 8, crawfish; 1, earth worms; 1, offal; 1, catfish, and three were empty. In addition to this list, moles, squirrels, young rabbits, and small snakes enter into its bill of fare.

(12)—Buteo swainsoni. SWAINSON'S HAWK.

THIS is a fairly common bird in Iowa. It is of an exceedingly peaceful disposition and seldom kills a bird or makes a visit to a poultry yard unless food should be more than ordinarily scarce. It lives almost entirely on the smaller quadrupeds—squirrels, gophers, rats and mice. It also kills large numbers of insects, and remains of snakes are occasionally found in its nest. In localities where the large black cricket, so destructive to agricultural interests, is found, this hawk is known to make them almost an exclusive article of diet.

(13)—Buteo latissimus. BROAD-WINGED HAWK.

THE Broad-winged Hawk is fairly common in Iowa on the average, being quite common in some portions, and being almost lacking in others. It is one of the most beneficial of our Raptores, seldom committing depredations in the poultry yard, and only rarely killing a small bird of any kind. Its food consists chiefly of harmful rodents, such as weasels, mice, gophers, ground squirrels, shrews, frogs, toads, small snakes, larvæ of insects, grass-hoppers, and beetles.

[CONTINUED IN NEXT ISSUE.]

OBSERVATIONS ON THE COWBIRD.

BY DAVID L. SAVAGE.

Paper read before the Second Congress of I. O. A.

WITH what rare pleasure do we watch for the return of the birds, when all nature is awakening into new life! At this season of the year, the gurgling notes of the Cowbird seem to possess a degree of melody. The first scattered flocks arrive during the last week in March or the first week in April, and in a short time are followed by large numbers which scatter almost indiscriminately over the open fields and woodlands, along the streams and marshes. Their superabundance and the presence of more beautiful songsters, soon makes their attempt at singing sink into insignificance.

The Cow bird seems to have a slight preference for pasture lands, where horses, cattle and sheep are grazing; they are continually running about the feet of the animals, sometimes perching on their backs. I have seen as many as six at one time perched on a sheep's back. The insects which accompany the herds form the attraction for the birds.

During the latter part of July until the first of September, adult birds of this species are seldom seen, during these sultry days they either go north or pass their time in secluded places. Early in September flocks may be seen

flying south and by the first of October the most of them have gone, except a few young birds that sometimes remain throughout the winter. I have never noted adult birds here after October.

In the winter of 1892-'93 a flock of perhaps twenty-five young Cowbirds of the year, stayed about a farmer's feed-lot near Salem. Even in the severest weather they were seen feeding in the lot amongst the cattle; when their hunger was satisfied, they retired to the lee-ward side of the barn and nestled close together.

In speaking of the food of this bird, I cannot do better than to quote from a paper of Prof. F. E. L. Beal's, which was read before the Biological Society of Washington, in March, 1896.

He gave the results of an examination of nearly 400 stomachs of the Crowbird, collected in twenty states and the District of Columbia. Every month in the year was represented except January and February, and the food was found to consist of animal and vegetable matter, in the proportion of about 28 per cent of the former to 72 per cent of the latter. Spiders and harmful insects compose almost exclusively the animal food, while weed seeds, waste grain and a few miscellaneous articles make up the vegetable food. The conclusion was reached that this "black vagabond," as the scientific men have termed it,—*Molothrus ater*—*Molothrus,* Gr., vagabond; *ater,* Lat., black,—does much more good than harm and should be protected.

The most remarkable trait in this species is the unaccountable practice it has of laying its eggs in the nests of other birds, instead of building a nest and hatching them for itself. It is a common thing to hear people condemn the Cowbird on account of its parasitic habits.

Wilson says, "What reason nature may have for this extra-ordinary deviation from the general habits of birds is, I confess, altogether beyond my comprehension. Many conjectures indeed might be formed as to the probable cause; but all of them, that have occurred to me, are unsatisfactory and inconsistant. Future and more numerous observations, made with care, may throw light on this matter; till then we can only rest satisfied with the reality of the fact." With the large number of observers that we have today, this still remains an unsolved mystery.

The female commences laying the latter part of April—the 22nd the earliest date I have found their eggs—and I have found fresh eggs as late as the 27th of July. This makes over four months as the breeding season; one female might lay a large number of eggs in this time.

Of the forty-six bird's nests that I have examined the past season that contained one or more eggs of the Cowbird, two were in April, twenty in May, twenty-two in June, two in July, thus showing that in this locality most of the eggs are deposited in May and June. In the forty-six nests, seventy Cowbird's eggs were found; twenty-six with only one egg of the interloper, fifteen with two, two with three, one with four, one with five. More than fifty-five per cent of the nests found only contained one Cowbird egg.

The female Cowbird prepares to find a nest that is just completed and as yet has none of the owners eggs in; here the intruder deposits her egg with confidence that it will hatch first, as ten days will hatch her egg, while twelve or fourteen is required for most eggs of Passeres birds.

If the Cowbird finds it necessary to lay her egg in a nest with other eggs, she often rolls one of the owner's out so that when the mistress returns there will still be the same number of eggs, and probably the exchange will not be noticed. This species has little preference as to the location of the nests in which to deposit her eggs. I have found them from a Prairie Horned Lark's nest, placed by a hill of corn, and a Pewee's nest, on a shelf in an old vacant house, the only entrance being a broken pane in a window, to a Blue-gray Gnatcatcher's nest in the depth of the woods and twenty-five feet from the ground.

Of the forty-six nests before spoken of, fourteen were placed on the ground, ten within two feet of the ground, ten between two and ten feet, and twelve more than ten feet from the ground. I have found twenty-five species imposed upon by the Cowbird: i. e., Robin, Towhee, Vesper Sparrow, Chipping Sparrow, Field Sparrow, Blue-gray Gnatcatcher, Blue-winged Warbler, Yellow Warbler, Worm-eating Warbler, Baltimore Oriole, Orchard Oriole, Pewee, Kingbird, Red-eyed Vireo, Wood Thrush, Indigo bird, Scarlet Tanager, Prairie Horned Lark, Yellow-breasted Chat, Water Thrush, Western Yellow-throat, Oven bird, Meadow Lark, Rose-breasted Grosbeak, and Redstart. The Field Sparrow and Indigo bird are the species that I have found to be most imposed upon by this imposter, possibly because they are the most plentiful of the small birds nesting in my locality.

The only species that has come under my observations which objected to the Cowbird's egg in its nest was the notorious Kingbird.

For a week I made daily visits to an old orchard where a pair of Kingbirds had their nest in one of the old apple trees. I saw the last material brought which completed the home and counted the eggs, one, two, three, but on the morning when I expected to find the fourth when I approached the tree I saw that a stranger was on the nest; I cannot say whether I or the stranger saw the other first. Nevertheless lady Cowbird made short work of slipping off the nest and reaching the nearest woodland, she not even paused to give me a morning salutation as the Kingbird was in the habit of doing. Climbing to the nest, I found three of the Kingbird's eggs and one of the Cowbird's.

Returning in about an hour to see how matters were at the Kingbird home, the female was on the nest and all seemed quiet; but lo, the poor Cowbird egg was not in the nest, nor under the nest, nor could I find it anywhere. Undoubtedly master Kingbird had removed it. He would not allow his beloved mate to be converted into a foster parent.

I have never found a double nest of any of our birds where the owner had built an addition to her nest to cover the Cowbird's egg, although some writers say that this is often done.

A few words about the great variation in the eggs of this species. Of twenty-five eggs in my collection, the average size is .86 x .69 inches; the largest .97 x .78; the smallest .75 x .65. It is a noticeable fact that the eggs of the

Cowbird always resemble the eggs of the owner that are in the same nest. Their smallest egg that I ever found was in a Blue-gray Gnatcatcher's nest; it had very minute markings and actually resembled the Gnatcatcher's eggs. Eggs in the Meadow Lark's, Towhee's and Vesper Sparrow's nests were impossible to tell which were which, except by the differently tinted yolks.

We now come to the most interesting part of the Cowbird question, the discussion. My object in choosing this subject was not that I had anything of special interest, but contrary-wise, on account of my ignorance and the desire to hear the after-remarks of the fellow-members upon this much condemned species.

[THE DISCUSSION WHICH FOLLOWED THIS PAPER WILL BE GIVEN IN FULL IN THE NEXT ISSUE.—ED.]

NOTES ON THE WARBLERS OF JACKSON CO.

BY H. J. GIDDINGS, SABULA.

Paper read before the Second Congress of I. O. A.

IT is not my purpose to give a complete list of the Warblers of Jackson county, but will simply give a few notes on such species as I have observed during the present season. These notes all refer to the eastern part of this county, which is also the most eastern point of the state, and about the center north and south.

Mniotilta varia. BLACK AND WHITE CREEPER.

A COMMON migrant, arrives in last of April. The bulk go further north but a few must breed here, for although I have never found a nest, I have seen both male and female birds during the summer.

Protonotaria citrea. PROTHONOTARY WARBLER.

Is one of the very rare Warblers in this county. Saw a single specimen this season.

Helminthophila pinus. BLUE-WINGED YELLOW WARBLER.

A RATHER rare breeder. The nests I have found of this species have been placed on low vines and bushes close to the ground in the edge of thickets; nests bulky, composed of leaves lined with grass, pieces of grapevine and hair.

Helminthophila ruficapilla. NASHVILLE WARBLER.

THIS species is more common than is generally supposed, its small size and inconspicuious coloring allowing it to escape notice. I found it quite common during migration this season.

Helminthophila peregrina. TENNESSEE WARBLER.

THIS is one of our most common Warblers during migration, being abundant every spring. They arrive about May 1st and remain present about two

weeks; very noisy and easy to find. I have not found it to vary much in numbers one season with another.

Compsothlypis americana. PARULA WARBLER.

THIS interesting little Warbler is a tolerably common migrant and easy to find, for although of small size, it is not shy and easy to approach. It was quite common for a week the past spring.

Dendroica æstiva. YELLOW WARBLER.

A COMMON breeder, nesting in low bushes. Too well known to need further comment.

Dendroica cærulescens. BLACK-THROATED BLUE WARBLER.

THIS I consider as one of our rare Warblers, having only noted it a few times.

Dendroica coronata. YELLOW-RUMPED WARBLER.

PRIOR to the spring of 1895 this was a very common species here. In former years they usually arrived about the middle of April in large numbers and I have frequently seen them feeding on the ground in plowed fields during cold spells when other food was scare. In the spring of '95 I did not see over ten individuals and the first not until May 5th. In spring of '96 they were only noted on two days, April 28th and 29th. The question arises, did the same cause that almost exterminated the Blue birds also desiccrate this species?

Dendroica maculosa. MAGNOLIA WARBLER.

THIS beautiful species is a tolerably common migrant, but owing to its late arrival is not easily seen, by the trees being in leaf; first was seen May 8th, 1896.

Dendroica pensylvanica. CHESNUT-SIDED WARBLER.

AN abundant migrant and rare breeder; bulk present about three weeks in Spring.

Dendroica castanea. BAY-BREASTED WARBLER.

Is a rather rare migrant, only one specimen seen the present season. This species varies much in numbers in different seasons; a few times I have found it to be as common as the Chestnut-sided.

Dendroica blackburniæ. BLACKBURNIAN WARBLER.

THIS brilliantly colored Warbler seems to be uncertain in its movements, some seasons being quite common and perhaps the next scarcely one to be found. I saw but a single bird the past spring.

Dendroica vigorsii. PINE-CREEPING WARBLER.

A VERY rare species. I shot a male April 17th, 1896, and saw another April 20, which is the first I have ever noted here.

Dendroica palmarum. PALM WARBLER.

A COMMON and early migrant; mostly all gone in a few days.

Seiurus aurocapillus. OVEN BIRD.

A COMMON breeder; arrives early for a Warbler and departs early in the fall. Every patch of woods in this locality contains a pair or two during the summer.

Geothlypis formosa. KENTUCKY WARBLER.

THIS specie must be classed as rather rare but a few breed here every season. I know of a place where it can be found every season; saw the first, last spring, May 8th, next, May 16th and found a nest on May 29th containing 1 egg and 2 Cowbird eggs, incubation begun. This nest was placed in a bunch of ferns three inches above the ground and well concealed by the ferns hanging over it, it was large and bulky, lower part entirely composed of oak leaves with inner nest of fine twigs and roots and lined with hair.

Geothlypis trichas occidentalis. WESTERN YELLOW-THROAT.

A COMMON summer resident, but varies much in numbers in different seasons. The present, it is one of our most common birds. Its nests are usually placed in the edge of thickets, but I have found them in open pasture fields in a slight depression of the ground by a bunch of grass.

Icteria virens. YELLOW-BREASTED CHAT.

THIS, our largest Warbler and a very handsome bird, is a common summer resident. Upon its first appearance in spring it is very shy and not often seen but as the nesting season approaches the male becomes very noisy and not very hard to approach. In the latter part of the season they are hardly ever seen and are all gone early in August.

Sylvania mitrata. HOODED WARBLER.

I HAVE only one record of this species; that was in the first of June, the present season.

Sylvania canadensis. CANADA WARBLER.

THIS species is not very common, but not so rare as might be supposed, its habits of keeping in the tree-tops causing it to be seldom seen.

Setophaga ruticilla. AMERICAN REDSTART.

A WELL known species of an unsuspicious nature, an abundant migrant and quite common breeder. The nest of this species closely resembles that of the Yellow Warbler. June 19th, 1896, I found a nest which, as far as position and structure goes, could not be told from a nest of the Yellow Warbler. It was placed in the crotch of a dog-wood, four feet above the ground; composed of grass and plant-down compacted together, lined with fine grass and feathers and contained three eggs and one egg of the Cowbird. The nests of this species which I have found have never averaged as high above the ground as is usually stated, all of them ranging in height from four to 15 feet and more at four feet than any other height.

In conclusion I would state that I seldom find a Warbler's nest without one or more eggs of the Cowbird and as every one means the destruction of a brood of Warblers would it not be a wise plan for the Association to declare war against this parasite? It appears to me that if every member would constitute himself a committee of one to destroy both eggs and birds whenever possible it might be the means of at least holding this species in check.

BOB WHITE.

BY WILMON NEWELL, HULL, IA.

LOOKING over the many beautiful and beneficial birds, the lover of Nature, as well as the true sportsman, does not fail to pause and feast his mind's eye upon the form and grace of our common game bird, the Quail. The terms, "Bob White" and "Quail," are both widespread in their use but that they both refer to the same bird, *Colinus virginianus,* there is not the least doubt.

Though comparatively scarce in portions of the state, yet it is doubtful if the Quail is totally extinct in any one locality. In the central part of the state, and especially around Ames, it is is not a common bird, but flocks are met with in the timber along the Skunk and Des Moines rivers. In this, the northwestern portion of the state, they are abundant.

The past few mild winters and a stricter enforcement of the game laws have given them a fine chance to increase. Nearly every farmer's grove has its flock of from ten to thirty, to say nothing of those found in the brush along creeks and rivers. Twenty five years ago a Quail was a rarity in this region, even along the rivers. Like green islands in a desert, the settlers' groves began to appear here and there over the prairies. Following close behind the pioneers came the Quails and immediately set up housekeeping. The kind hearted settlers did not drivethem away nor did the hunter's gun disturb their domestic affairs. Forced to avoid only their natural enemies, they took to the groves and there nested in the weeds and leaves.

Nests containing twenty eggs were common and the author has counted as high as twenty-seven in a single nest. Such large sets were probably laid by two or more birds, whether owing to lack of proper nesting sites we cannot say. What a picture of peace and harmony they were, undisturbed by man.

Their nesting habits are essentially the same at present but they have become more wary. When the eggs are hatched, the mother leaves the nest with her little ones and begins the hunt for food. They follow her much as do young Prairie Chickens or even our own tame chicks. Cute, little, downy fellows they are too. Lively at all times, they are veritable streaks of lightning when they take after a bug or vie with each other for some tempting morsel found by the mother. Full growth is obtained in the latter part of summer and by early winter the birds have become plump and fat.

As soon as the first light snow is on the ground, the local sportsmen are after them in full force. A knowledge of the birds' habits gives the hunter an unfair advantage. During this season the Quails leave their roosting place in a grove about daylight and feed along the road until sunrise or a little later. Then if a corn-field be handy they will trot into it and, keeping well together, feed through the field during the forenoon. Of course if snow has fallen the previous afternoon or night, their tracks are distinctly visible and the hunter readily tracks them into the corn-field where, by careful walking, he can get within easy range. At a slight noise the Quails will invariably run close together or dart into a bunch of weeds or grass. At this moment a single shot

from the pot hunter will work great slaughter. Ten or a dozen birds, out of a flock of fifteen or twenty, at a single shot is the usual number killed in this way.

Once fired into, the remaining birds scatter in every direction. Each individual Quail looks out for himself and after flying thirty or forty rods, alights, runs a few rods more and then completely hides in a bunch of husks or anything else handy. Here he stays and he has got to be literally kicked out before you can get a shot at him. When he does get out, though he does it with a whir-r-r, and without ceremony, it takes a mighty good shot to interfere with his intention of going somewhere else. Once in a while a hunter is found who can shoot them on the wing and rarely miss, but as far as the local nimrod is concerned they are perfectly safe.

A severe winter is very hard on our little friends and one such so nearly exterminates them that four or five years are required for them to regain their numbers. They roost in the groves or along sloughs and fences. The colder the weather the closer they huddle together to keep warm. This attempt at self preservation proves their destruction for the drifting snow buries and sometimes smothers them. Not until spring thaws can one realize the destruction. Well do we remember how the tears of pity used to fill our eyes during the severe winter several years ago when hundreds of the poor creatures perished.

Shooting Quail is considered a very fine sport and true it is that a steadier nerve and a quicker action are nowhere required than at this pastime. Be that as it may, the lover of Nature must raise his hand against such sport for it is cruel and useless. The amount of meat on a single bird will not pay for the time and trouble required to kill it. Such shooting is no more than satisfying the bloodthirsty brute nature of the shooter. As far as the skill is concerned, that could just as well be acquired and used somewhere else.

During the winter, if unmolested, the Quails become exceedingly tame. They will wander around the barnyards and even eat with the tame fowls. The farmer zealously protects them and woe unto the man or boy who attempts to thin out his flock of Quails. Would that the farmer realized as well the importance of preserving many of our other birds, especially the hawks and owls. If we could enlist the farmers in our cause, success in the protection of our birds would be assured. As it is, however, many species are approaching rapid and total extinction and our utmost efforts can stay their end but a few short years. Nevertheless let us do our feathered friends a good turn when we have an opportunity. One such opportunity we have in discouraging the killing of our Quails. If anyone possesses the bloodthirsty desire to slay them, let him steal upon them, without dog or gun, in their natural haunts and there study their matchless innocence and beauty. Then if he can harm one of them without a conscious pang of sorrow and regret, his must be a hardened heart indeed.

An Accidental Visitor.

Mr. Franck C. Pellet of Atlantic sends me a discription of what will prove to be one of the murres, probably the Atlantic form, Uria troile Linn. It was captured alive, but thoroughly exhausted, Dec. 20th near Atlantic and died soon after. It has been mounted and is now in Mr. Pellett's collection. A strange visitor for our state, surely.

J. H. Brown, Davenport, Ia.

THE NEW YEAR'S WORK.

WITH the commencement of our 1897 work, let us bear in mind the work of our Association now under way and so shape our spring work as to be of the greatest value to that. All points in doubt should receive special attention, as well as the rare birds and especially the rarer nesting birds; the Flycatchers, Warblers, rare Vireos, etc.

The food of all the birds coming under our observation should be carefully noted also, and deductions made from these as to their economic value to the agriculturist of our state.

Among points of special interest for the spring work, I would suggest the following:—The Wrens, especially by observers in the southern and eastern parts of the state; the "Traill's Flycatchers," by observers both in the eastern and western part of the state; and the Shrikes, both in the southern and northern part of the state.

The Wrens and Shrikes are not easy to differentiate among the closely related species, and with regard to the "Traill's Flycatcher" it seems to me that the prevailing form in our state will be found to be the Little Flycatcher, instead of Traill's. Among the waders there seems to be room for observation also, and among the Sparrows too, both migrant and summer residents.

Mr. Savage has suggested that I take up this work to be reported upon at our next congress. So if the members will send me such skins of species about which there is any doubt as to their identification, I will do the best I can with them and we can hold an informal "inquest" at the next congress, after which, of course, all specimens will be returned to the collectors. And last but not least, let us have **full** reports from each member of the birds having come under his observation, both migrants and breeders, and when he has observed the same species in two or more counties, let us have all the records, as the distribution of the birds **within** our state will be of great importance.

J. H. BROWN, Davenport, Ia.

BIRD MIGRATION IN IOWA.

IN the winter of 1881-'82, Prof. W. W. Cooke made an attempt to secure the assistance of the ornithologists of Iowa in studying the migration of birds; but a change of residence on the part of Mr. Cooke from Iowa to Minnesota, made it necessary to modify the original scheme, and it was desided to increase the area to be investigated to the whole Mississippi Valley, the admirable report—Bird Migration in the Mississippi Valley—published by the U. S. Dept. of Agriculture, being the outcome of this co-operation. The scheme of studying bird migration in Iowa has never been resumed.

In prepairing the "Birds of Iowa" with annotated notes, the compilation committee thought a proper course to pursue would be to study the bird waves which pass through the state during the spring of 1897. In order to do this successfully we must have the co-operation of a large corps of workers well distributed throughout the state. Not only do we solicit aid from all the members of the Iowa Ornithologist Association, but from every observing ornithologist in the state and adjoining states. Our method of work will be the same as Prof. W. W. Cooke used in prepairing his work.

We desire observers to send in reports at the close of each month. First, let those willing to contribute, write us at earliest convenience, giving the report for January. We will give full credit for all notes submitted. For the instruction of observers, a copy of January, 1897, bird movements at Salem, Ia., Lat. 41 degrees, 40 minutes, observed by David L Savage, is given.

SYNOPSIS OF MIGRATION, LAT. 41° 40' FROM JANUARY 1st TO JANUARY 31th, 1897.

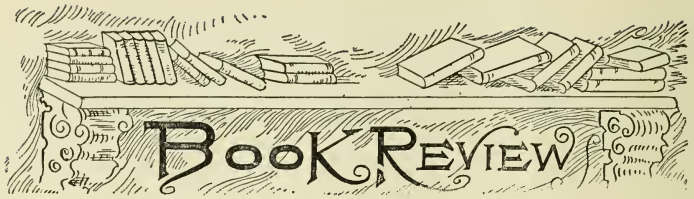
Jan. 1	Mild and damp.		
" 2			
" 3	Wind in east.		
" 4			
" 5	Moderately cold.		
" 6	Theo. 10%		
" 7		Ground bare.	
" 8			
" 9			
" 10			
" 11			Creeks not entirely frozen over.
" 12	Warm for winterweath'r		
" 13	A few Robins, Mourning		
" 14	Doves, and Flickers are		
" 15	with us yet.		
" 16	First flock of Geese.		
" 17	Three inches of snow.	Light snow on the ground. No sledding on the roads.	
" 18			
" 19			
" 20			
" 21			
" 22			
" 23	Cold wave, with snow storm.		
" 24			
" 25			
" 26			
" 27	Coldest period.	Ground covered with four inches of snow.	Creeks frozen.
" 28	Theo. 15% on the 25th.		
" 29			
" 30			
" 31			

Of course, as the season advances, the bird movements become more marked and the climatic changes will not form as conspicuous a part in the report.

This in no wise supplements the work of the check-lists, which we sent out with the October IOWA ORNITHOLOGIST. We acknowledge receipt of check-lists from the following persons: i. e., Ernest Irons, Council Bluffs; Dr. Guy C. Rich, Sioux City; Walter G. Savage, Hillsboro; Edmonde I. Currier, Keokuk; Rob't. A. Tomlinson, Alden; J. Eugene Law, Perry; J. A. Savage, Hillsboro; R. D. Goss, New Sharon; Wm. A. Bryan, New Sharon; Mary L. Raun, Manchester; Wm. E. Praeger, Keokuk; C. C. Smith, Decorah; Lynda Jones, Oberlin, Ohio; Isador S. Frostler, Omaha, Neb.—the last two named having collected in Iowa.

Let all those who received the check-lists fill them out immediately, a cross in front of the bird's name to indicate summer resident and a dash not summer resident. Take a little time and send your check-list in at once, as you hinder the work of the committee by delaying. The chairman of the committee desires to receive a letter from every member of the I. O. A. before the middle of March.

Committee on Compilation. { DAVID L. SAVAGE, Ch'm. PAUL BARTSCH, CHAS. R. KEYES, JOHN V. CRONE, MORTON E. PECK, H. J. GIDDINGS.



New books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor, who will examine them personally and give them due consideration.

"Anderson's Birds of Winnebago and Hancock Counties, Iowa."—The second list of a series, which it is hoped will continue to be published by Iowa ornithologists. These lists have an inestimable value in the preparation of the "Birds of Iowa" now under way by the I. O. A. committee. The topography of these counties show that their greater area is prairie and marsh land and the large number of water birds, seldom found in other parts of the state, make this list of especial value. The list is based mainly on observations made by the writer within the last six years. Of the 216 species noted, 16 are classified as permanent residents, 101 as summer residents and 99 as transient and winter visitors. The list is handsomely printed, comparatively free from typographical errors and is a welcome addition to the ornithological literature of the state.

"Forbush on the Crow in Massachusetts." This paper is divided into the following headings: i. e., Migration, Gregarious Habits, Mating and Nesting Habits, Digestive Capacity of the Crow, Food of the Crow, the Protection of the Crops, Is the Crow a Friend. Under each division there is from one to eight pages of interesting and valuable information. In answering the often asked question—Is the Crow a Friend?—the writer says: "The wholesale destruction of Crows is said to have been followed by a remarkable increase of injurious insects, and from what is now known about the Crow's food we may conclude that, unless the birds become unduly numerous, they are likely to be of great service to the farmer. It will pay the farmer to sacrifice some portion of his products to the Crow, provided he uses care that the cunning bird does not over-reach him in his bargain."

PUBLICATIONS RECEIVED.

Forbush, E. H., "The Crow in Massachusetts." (Mass. Crop Report for August, 1896, pp. 24-40.)

Jones, Lynds, "General Notes." Bulletin, Nos. 9, 10, 11. Wilson Orn. Chap. Agassiz Assn. July, Sept., Nov., 1896.

Auk, Vol. 14, No. 1, January, 1897.

Le Naturaliste Canadien, Vol. 23, Nos. 9-12, Oct., Dec., 1896.

Museum, Vol. 3, Nos. 1-3, Nov.-Dec., 1896, Jan., 1897.

Nidologist, Vol. Nos. 3, 4, 4, 5, (combined) Nov.-Dec.-Jan., 1896-'97.

Oologist, Vol. 14, Nos. 1-2, Jan. Feb., 1897.

Oregon Naturalist.

Osprey, Vol. 1, No. 3, November, 1896,

Popular Science News, Vol. 31, Nos. 1-2, Jan.-Feb., 1897.

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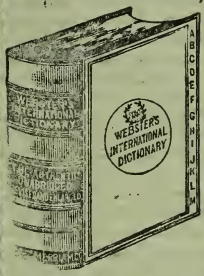

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APRIL, 1897.

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TABLE OF CONTENTS.

The Iowan Raptores, Chas. R. Keyes - - - - - - 17
The Wrens of Burlington, Iowa, Paul Pantsch - - - - 21
Notes and News, - - - - - - - - - - 24
A Complete and Annotated List of Iowa Birds, Committee - - - 25
Book Review, - - - - - - - - - - 29
Publications Received, - - - - - - - - - 29
Notes from Forest City, Iowa, R. M. Anderson - - - - 30

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SNOWY OWL.

Nyctea nyctea.

The Iowa Ornithologist.

Vol. III. APRIL. 1897. No. II.

THE IOWAN RAPTORES.

BY CHAS. R. KEYES.

Paper read before the Second Congress of I. O. A.

Continued From Last Issue.

(14)—*Archibuteo lagopus sancti-johannis.* AMERICAN ROUGH-LEGGED HAWK.

THE American Rough-legged Hawk, one of the largest of our Hawks and distinguished by its feathered tarsus, is found throughout the whole of North America, but is only a winter resident south of Canada. It breeds mainly north of the St. Lawrance river, and so has no especial influence on agriculture. It is known, however, to be of a peaceful disposition, using the most humble food, which consists principally of meadow mice and small rodents. Although breeding in localities in British America where valuable game birds are abundant, it is seldom, if ever, known to disturb them.

(15)—*Archibuteo ferrugineus.* FERRUGINOUS ROUGH-LEG.

THE Ferruginous Rough-leg is a large, powerful, and handsome species, common on the Great Plains of the west. It is occasionally, only, in Iowa. Its habits are similar to those of the Rough-legged Hawk, its food consisting chiefly of small rodents, as gophers, mice, prairie dogs, etc., which abound in prairie regions which it inhabits.

(16)—*Haliœetus leucocephalus.* BALD EAGLE.

THE Bald Eagle is not as common in Iowa as formerly and can scarcely be classed as a common bird here. However, pairs of these Eagles are frequently seen along our water courses, especially in the early spring, and occasional pairs are known to breed in the state. For a bird of its glory it is hardly as useful as it should be. While seldom affecting the farmer's interests directly, it destroys large numbers of birds which, at least, are not prejudicial to his interests. Its principal articles of diet are water fowl of various kinds, geese, brant, ducks, cormorants and others. It also uses fish, often captured at second hand from the American Ospey, and has been known to eat carrion. This last, though, is probably made use of only when other food is not procurable. Cases of these birds catching young lambs, and even young children, and flying away with them, as has sometimes been reported, must be very rare indeed, if not in most cases fables.

(17)—*Falco mexicanus.* PRAIRIE FALCON.

THE Prairie Falcon is casual to Iowa, being common on the Great Plains of the West. It is probably more harmful than beneficial, as it lives largely on

other birds, as Black birds, Doves, Pigeons, Meadow Larks and various game birds. It lives partly on hares, where these are abundant, and on small rodents of various kinds; but this is the case when other food is scare.

(18)—*Falco peregrinus anatum.* DUCK HAWK.

THE Duck Hawk, or Peregrine Falcon, resident in Iowa, and might almost be classed as a rare bird. It certainly cannot be called common. It is the boldest of our birds of prey, and it would seem that, from an economic standpoint, it is almost indefensible. Its food consists of the different species of Ducks; game birds, such as Bob Whites, Pigeons and Grouse; Hares, various small birds and domestic fowls.

(19)—*Falco columbarius.* PIGEON HAWK.

THIS bird is occasionally seen in Iowa during the fall and winter seasons, but it is rare that a pair breeds here, as the great majority spend the spring and summer farther north or in higher altitudes than are found in Iowa. The food of the Pigeon Hawk consists, to a great extent, of small birds. It is said that it will not hesitate to attack one fully as large or even larger than itself. Its diet in summer is made of insects, as grasshoppers, crickets, etc.

(20)—*Falco sparverius.* AMERICAN SPARROW HAWK.

THE little Sparrow Hawk is a common summer resident in Iowa. On account of its size it has often been confounded with the Sharp-shinned Hawk, and has been accused of sins which should have been laid to the charge of this latter species. Although the Sparrow Hawk sometimes kills small birds, especially in winter when food is scarce, yet its food is made up for the most part of small rodents, insects and larvae of various kinds, lizards and small snakes. When grasshoppers are abundant they form the bulk of its fare.

(21)—*Pandion haliaetus carolinensis.* AMERICAN OSPREY.

ECONOMICALLY the American Osprey seems to have little effect either for good or evil. According to Capt. Charles Bendire of the U. S. Army, "The food of the Osprey consists entirely of fish, and these are usually the inferior species, such as are seldom used for the table." Although the bird is nearly cosmopolitan in distribution, it is uncommon in Iowa; at least it is a rare species in the vicinity of Mt. Vernon.

(22)—*Strix pratincola.* AMERICAN BARN OWL.

THE Barn Owl is rare north of latitude 41°, and so is not common in Iowa. Few birds are more valuable from an economic standpoint than the Owl, though it is subject to much persecution from the mistaken supposition that it robs the poultry yard. This supposition gains its plausibility from the fact that the bird is so commonly seen in the neighborhood of barns and outhouses. As a matter of fact the Barn Owl subsists almost entirely on noxious vermine, as mice, rats, ground squirrels, pouched gophers, small reptiles, bats, frogs and such insects as crickets, grasshoppers and beetles. It is rare that a small bird

becomes a prey to this species, though doubtless scarcety of other food would sometimes make this the case.

(23)—*Asio wilsonianus.* AMERICAN LONG-EARED OWL.

This is a common species in Iowa, and is also a useful and almost harmless species. Remains of poultry and of birds are sometimes found in the stomachs of these birds, but this is a rare occurance. By the larger part of their food consists of squirrels, chip-munks, gophers, mice and frogs.

(24)—*Asio accipitrinus.* SHORT-EARED OWL.

The Short-eared Owl is also common in this state, being resident, as is also the Long-eared species, throughout the year. It is the owl commonly seen flying low over the open meadows and sloughs. It is undoubtedly a beneficial species, using as the articles of its diet small rodents of various kinds, principally meadow mice and gophers, as also grasshoppers and different kinds of insects. Occasionally a small bird enters into the bill of fare.

(25)—*Syrnium nebulosum.* BARRED OWL.

This is a large species common everywhere in Iowa where large timber exists. Being almost as large as the Gt. Horned Owl it sometimes receives discredit which should be given to the latter species. The experiments of Dr. C. Hart Merriam, of the U. S. Dept. of Agriculture, tend to show that the Barred Owl is far more beneficial than otherwise. Of ninety-five stomachs examined only three contained poultry; twelve, other birds, none of which were game birds; forty contained mice; fifteen, other mammals, among these only a few rabbits and timber-squirrels; four, frogs; nine, crawfish; two, fish; sixteen were empty. Besides these, snakes, earth-worms, grasshoppers and different species of beetles and flies are eaten. Meadow mice seem to be the staple diet with this species. The writer remembers one nest containing young birds that was almost lined with mice tails, these being the only remains of food of any kind found in or near the nest cavity.

(26)—*Nyctala acadica.* SAW-WHET OWL.

The Saw-Whet or Acadia Owl is the smallest member of the family found in Eastern North America, and cannot be said to be common anywhere. It is an innocent bird for the most part, not often making a meal on a small bird of any kind. Its food is made up of mice and other small rodents for the most part. Probably frogs and insects are also eaten.

(27)—*Megascops asio.* SCREECH OWL.

The Screech Owl is well known in Iowa and is common. It is one of the most profitable and useful of birds and deserves protection on account of the great numbers of mice and other rodents and noxious insects destroyed by it yearly. Crawfish, frogs and caterpillars are also eaten by this species. It seldom molests a bird.

(28)—Bubo virginianus. GREAT HORNED OWL.

OF the Owls commonly found in Iowa, the Gt. Horned alone seems to stand guilty and convicted of a long list of crimes, which make the bird harmful rather than beneficial. Is the largest and most powerful Owl in America, is common in Iowa and a resident throughout the year. It is not only generally conceded to be the most destructive of all our Raptores, but is said by some to commit more damage than all other species together. It is a frequent visitor to the poultry yard, where it kills numbers of chickens, turkeys, pigeons, ducks, geese, and Guinea fowls, even entering the coops after these at times, as many a farmer can testify. Bubo also plays sad havoc among the game birds, being the most dreaded enemy of the Grouse, Bobwhites, Prairie Hens and others. But one of the worst features of the bird's disposition is that it is wanton, killing many more victims than it needs for food, and often simply eating the heads of its prey if it can obtain these in sufficient number. Among mammals which are killed by the Gt. Horned Owl may be mentioned rabbits, squirrels, skunks, muskrats and the smaller rodents.

(29)—Bubo virginianus subarticus. WESTERN HORNED OWL.

THIS is a lighter colored form of the preceding species, which is rare in Iowa. In disposition it does not differ from the Gt. Horned Owl.

(30)—Nyctea nyctea. SNOWY OWL.

THE Snowy Owl reaches Iowa only in midwinter from the north and is fairly common only. The good done by this bird in destroying noxious rodents seems to be about counterbalanced by the damage done to the game and water birds.

IN addition to the above species the American Goshawk and Richardson's Merlin have been reported in Iowa. They must, however, be exceedingly rare and for the present will be disregarded.

A few conclusions from the above study may reasonably be drawn :

FIRST—Of the thirty species enumerated above, only eight, viz., the Sharp-shinned Hawk, Cooper's Hawk, Bald Eagle, Prairie Falcon, Duck Hawk, Pigeon Hawk, Gt. Horned Owl and Western Horned Owl are more harmful than beneficial.

SECOND—Of the eight harmful species only two, viz., Cooper's Hawk and Gt. Horned Owl are common enough to have any appreciable effect on economic interests.

THIRD—No objection could be made if a price were set upon the heads of the last two for practical purposes, and on the other six for the sake of consistency.

FOURTH—The other twenty-two species should be recognized by law as beneficial, or, better still, the farmer should look upon them as promoters of his own interests, and protect them for his own sake.

The question may be asked how are the two harmful species to be known from the harmless and beneficial ones. Quite easily. Every farmer's boy

knows the "Big Hoot Owl, with ears on his head." It is the largest Owl we have. The Cooper's Hawk is sometimes called the "Bullet Hawk" from the swiftness of its flight. It is also known as the "Small Hen Hawk," both names being appropriate. It is smaller in appearance than a crow, has a tail long in proportion to its body, is slaty-brown in color, and is usually quick and nervous in its movements.

THE WRENS OF BURLINGTON, IOWA.

BY PAUL BARTSCH.

PERHAPS no other group of birds in this locality is more interesting than our little busy bodies, the Wrens. Their queer, ever variable attitudes mingled with spirit of mischief and restlessness make them a pleasing mark to the eye. Should we spend some time in watching them in the performance of their domestic duties, beginning with courtship, wars, selection of nesting sight, and finally view the happy family, we will agree to ascribe to them superior intellect over many of their feathered companions.

The most abundant of the five species is the House Wren (*Troglodytes aedon*), the tenant of our bird box, the fearless enemy of the English Sparrow, with whom he successfully copes for the right to this, their domicile.

* The little fellow arrives about April 25th from his Southern journey and at once greets us with his vivacious, rattling song. He inspects the premises most carefully and gives vent to his pleasure in his ceaseless chant. The female soon follows, maybe a day or two later and is joyfully received by her mate.

Many skirmishes now take place between the Sparrows and the Wren but Mr. Wren generally holds his own and finally lays claim to the bird house, which has been cleaned on his return. He now has a mania for filling up every box with sticks and frequently becomes a nuisance when he persists in filling a mail box not intended for that purpose. Even this passes and graver duties call his attention. He has been quiet for some time, only occasionally in early morning and perhaps at eve has his song greeted our ears, and his angry rattle warns us when we approach too close to the house containing his treasures.

Mrs. Wren seems absent most of the time for we seldom see her and when she appears on the scene it is only to take a sun bath and some food and then she returns quietly to her beauties. In due time we are informed of the presence of a younger generation by the sounds that eminate from the bird house. New life seems to have entered the pair and busily they both carry food to the young family, and hundreds and hundreds of trips do they make in a single day, always prepared to place something into their gaping bills. Most interesting of all, is the family on the move, the angry warning rattle hardly ever ceases. Cats, dogs, everything that creates the least suspicion is scolded by the pair,

* These notes were taken from observations made on a pair which inhabited one of our bird houses for a number of years.

leading the young about the fences, through the arbor, the trees and shrubs, inspecting the wood sheds and stables. The neighbor's yard is next subjected to a similar scrutiny and soon the whole family leaves the premises seeking a wider field of action, the work of the season being complete.

The bird house is by no means the only place used as nesting site by this bird, natural cavities in trees, old Woodpecker nests, mail boxes, cornices of houses and sheds, I have even seen them enter the space between the plastering and outer wall in a frame house through a knot hole. Anything possessing an opening and containing a suitable cavity may serve this purpose.

Some of the rarer instances that have come under my observation were nests in cliffs and on the switch board of an arc lamp. In the last case the nest was destroyed daily for a week or more by the trimmer of the lamps, but the Wrens persisted and it was always found pretty well advanced in construction the following day. At my request it was finally allowed to remain and it was not so bad a place after all for numerous insects, killed the previous night by the light, were within the globe each day and furnished the Wren family with many a rare morsel in compensation for the disturbance which they endured during the night, or maybe the sizzling and rattling of the lamp were looked upon as a lullaby.

THE next in abundance is the Short-billed Marsh Wren (*Cistothorus stellaris*). Contrary to the habit of his relative, the House Wren, he shuns the busy haunts of men and seeks the solitude of the marshy prairie. You may find him in abundance in swampy prairie traversed by a little rivulet, bordered by wild rice (*Zizania aquatica L.*). Here he makes his home and contrary to his pugnacious brother he seeks the company of his fellow Marsh Wren, breeding in colonies. It is indeed a pleasing sight to walk along the edge of one of these rills as Old Sol floods the scene with his morning light and kisses the sparkling drops from every reed now bent with dew. The little songster's lisping song, a plain ditty, will greet you on every hand; and bunched up on some tall reed you will see the performer with his cocked up tail and distended throat sending forth his morning prayer. He's not shy but will allow you to approach quite close looking you over and as if to say, you will not harm me, he continues his simple song.

The nest attached to some reeds near the ground consists of a woven mass of marsh grass,—a sub-spherical ball with an opening at the side—the interior being lined with finer material. I have often wondered how many nests one pair builds, for nests are very common, but eggs, well that is another question. Many times will the oologist pass his finger into a nest, only to find it empty and it required some time ere I perceived that the new nest which seemed ready for the compliment of eggs was nothing more than an effort of the male to keep himself busy while his mate was covering her jewels in an unattractive old looking nest.

THE Long-billed Marsh Wren (*Sistothorus palustris*) the cousin and neighbor of the last named specie is found in the same locality but sparingly only, and I have as yet to find a nest. In habit he resembles his lesser friend, possessing, however, a more secretive nature. Often have I chased one of these

for a hundred yards or more through tall reeds and duck weed (*Nelumbium luteum Willd.*) getting a glimpse of him now and then but never long enough to take an aim and finally loosing sight of him. The bubbling song always reminds me of a flock of Black Birds in the distance.

The fourth in order of abundance is the Bewick's Wren (*Thryothorus bewickii*). This bird is a rather uncertain summer resident; for some years he will fail to put in appearance and the next he may be quite abundant. This strong voiced bird with his long whisping tail, like the House Wren, seeks the habitation of man.

The long tail lends him a rather queer aspect and the perpetual sweeping of this organ in accent to every note, twist or turn cause him to appear not only comic but even ludicrous. Of all the birds about our yard I think he is the most pleasing as one never tires of his attitudes. Two instances of his breeding within our city limits have come under my personal observation and in both cases the nest was placed in a shed on the beam supporting the roof, i. e. where the roof joins the wall. Both were bulky affairs; the space, about 8 x 10 inches, was filled for more than three feet with sticks of various sizes. The nest proper, near the center was well lined with feathers from the common fowl, picked up about the yard, and contained a set of six (May 25th, 1892, and May 30th, 1893,) which in each case were left unmolested in order to give me an opportunity to observe the birds for a longer period.

The Bewick's Wren is not contented with the limited stamping ground but will roam over considerable territory. Even in nesting time he seems to follow the same route daily and if you have once followed him in his morning rambles from fence to fence, yard to yard and bush to bush, you can easily keep in his wake a second morning, for his path is practically the same. Only when the young have made their appearance does he restrict his rambles to the immediate vicinity and like the House Wren, his only ambition now seems to be to keep the little gaping mouths supplied with food. As soon as the young are able to move, the pair lead them off into new fields and consequently from our sight.

The last of the lot, the Winter Wren (*Troglodytes hiemalis*), is a winter resident, not common to be sure, yet one can always find him in his season if one knows where to seek him.

When most of our birds have sought a warmer clime and the fast falling leaves speak of approaching winter; when the advance Snow Bird mingles with the host of retreating Myrtle Warblers and the Blackbirds' flying train seems endless, then our little inconspicuous friend comes from his Northern abode to spend with us the cheerless winter. The rocky bluffs along the Mississippi and its tributaries are his domain. The rougher the crag and denser the brush that bounds it the better it suits his Wrenship. He is a very quiet unattractive bird, uttering only a few notes of displeasure when disturbed as his short flight takes him from one retreat to another. He carefully inspects the numerous crevices of the rocky cliffs and gleans from them his sustenance.

Returning spring finds him restless and more active, preparing for his colder home, and when the last of the Snow Birds have left us, he is sure to have disappeared from his favorite haunts.

NOTES AND NEWS.

MR. J. H. BROWN writes that a Golden Eagle was captured not far from Davenport in December of 1896.

MR. DAVID L. SAVAGE will deliver a scientific lecture on "The Wonders of the Bird World" at Glendale, Iowa, the evening of April 27th.

DURING the months of March and April, thousands of Crows gathered every evening at a roost in Jefferson county, near the home of Mr. Hiram Heaton.

MR. GEORGE C. HOOVER, of West Branch, Iowa, writes that he has in his collection a specimen of Murre (*Uria troile*) taken in Johnson county, in January of this year.

MR. FRANK H. SHOEMAKER has left Hampton, Iowa, and located in Omaha, Nebraska. He is not forgetful of the I. O. A., but sends his wishes that it may have the greatest possible success.

PROF. FRANK A. WILDER has a zoology class at Ft. Dodge, Iowa, which is working up a list of birds of Webster county. He writes that if they can assist the committee on the "List of Iowa Birds" they will be pleased to do it.

MR. LYNDS JONES, an instructor in Oberlin College, Oberlin, Ohio, writes: I am very glad that the I. O. A. committee is pushing the work of a new list of Iowa birds. My heart is still in my adopted state (Iowa) and many times I find myself planning to return.

MR. CHARLES R. KEYES, of Blairstown, Iowa, found a nest of the Red-tailed Hawk on April 6th containing one fresh egg. On April 10th, a nest of the Long-eared Owl containing three eggs and three young. His latest record in the first case and the earliest in the other.

A LETTER from Mr. Ernest Irons, of the University of Chicago, (formerly Council Bluffs, Iowa,) says that he is preparing an article for the IOWA ORNITHOLOGIST on the "Field Columbian Museum," touching the points of interest to the ornithologist. He will have it ready for the July issue.

MR. CARL FRITZ HENNING writes that his friend, Mr. Cal Brown, on October 23, (1896) secured an albino English Sparrow. He first noticed it on the 22nd, with a flock of twelve, feeding on the ground. Mr. Henning presented the specimen to Hon. Charles Aldrich, who has had it mounted for the state.

A WELL written and timely article, entitled "Bird Pictures," appeared in Scribners Magazine for April. The writer, W. E. Scott, scores the conventional method of bird-stuffing and furnishes eight pictures of birds mounted according to his ideas. He states that the bain of this work has been copying and imitating, not observing and originating.

MR. W. E. PRAEGER delivered a lecture on "Our Birds" at Keokuk, Iowa, on the evening of the 19th of March. The lecture was illustrated by a collection

of several hundred bird skins and other ornithological curios. Admission to the lecture, 25 cents. This was a very entertaining and instructive lecture, arousing in the hearers, a new interest in our constant companions, the birds.

PROF. A. J. BUFFINGTON, of Salem, Iowa, has become much interested in watching a colony of Eave Swallows contending with a number of those disreputable foreigners—English Sparrows—that had taken up the abode of the Swallows' before their arrival. He estimated that the Swallows in the colony would number near three hundred, the Sparrows being way in the minority, yet many were the hotly contested battles before the latter surrendered their claims of proprietorship. The last report was that for several days no Sparrows had been seen in the neighborhood.

THE editor of the IOWA ORNITHOLOGIST is preparing a series of papers, entitled "Birds of the Midland Region," for the Midland Monthly, of Des Moines, Iowa. The first paper will appear in the June number. Most of the illustrations are drawings from the pen of William Savage—Honorary member of the I. O. A. Of the talented collection of water color paintings of birds made by this gentleman, brief mention has been given in the IOWA ORNITHOLOGIST before. In some future issue we expect to give space to an extended description of his collection and print a number of half-tones from some of his best pictures. It is believed that an equal to Fuertes' is here.

A COMPLETE AND ANNOTATED LIST OF IOWA BIRDS.

COMPILATION COMMITTEE. DAVID L. SAVAGE, CH'M., MORTON E. PECK, JOHN V. CRONE, CAS. R. KEYES, PAUL BARTSCH, H. J. GIDDINGS.

THE committee-men stand ready and waiting to do their work of compiling the list, as soon as the notes are sufficiently complete. With the October 1896, IOWA ORNITHOLOGIST, a check-list of N. A. birds was sent to each member of the I. O. A., with a request to check off the names of the birds personally observed in the state, a cross to indicate summer resident and a dash, not summer resident and also asked that the lists be returned promptly. We acknowledge the receipt of lists from the following members: Ernest Irons, Council Bluffs; Walter G. Savage, Hillsboro; Edmonde S. Currier, Keokuk; Rob't A. Tomlinson, Alden; J. Eugene Law, Perry; R. D. Goss, New Sharon; Wm. A. Bryan, New Sharon; Mary L. Rann, Manchester; C. C. Smith, Decorah; W. W. Loomis, Clermont; Hiram Heaton, Glendale; Guy C. Rich, Sioux City. From ornithologists, not members of the I. O. A., but who have collected in the state, we have lists as follows: William E. Praeger, Keokuk; Melvin Sornes, Ft. Dodge; J. A. Savage, Hillsboro; Chas. K. Salisbury, Reinbeck; Lynds Jones and Isador S. Frostler. We mailed more than fifty lists; where are the others? Let the members attend to this matter at once. Every member should contribute to this work, in order to make the

list COMPLETE. Look up your check-list and return it without delay.

The call in the last IOWA ORNITHOLOGIST for the careful study of bird migration in the state has brought response from a number of workers. However only two—H. J. Giddings and W. G. Savage—have made out monthly reports as requested. These two gentlemen are doing excellent systematic field work and we cannot do better than give space to a monthly report from each.

SOME NOTES ON THE BIRDS AND WEATHER IN VAN BUREN CO., IOWA, MARCH, 1897, BY W. G. SAVAGE.

1. Light cloudy and warm with north-east wind. White-bellied Nuthatches cleaning out holes preparatory to nesting. Great Horned Owls setting and hatching.

2. Heavy cloudy with north-east wind, cool and misting rain; ground covered with 4 in. of snow. Birdlife on the standstill.

3. Clear with cold north-west wind. Red-tailed Hawks moving about, other birdlife generally quiet.

4. Dark, cloudy, with south wind and rain; birds very quiet.

5. Light cloudy, north-west wind; birds not moving much.

6. Light cloudy with north-east wind, cool. Wild Geese passing northward, Cardinal Grosbeaks whistling loud.

7. Dull cloudy with east wind, cool; birds on the stand.

8. Heavy broken clouds with south-east wind, thunder and rain. Blue-Birds common, Robins and Slate-colored Juncos increasing; Pewees, Meadow Larks, Mallard Ducks, Green-wing Teels and Bay-wing Sparrows appear.

9. Dull cloudy with north-west wind, cool. Purple Grackles, Song Sparrows and Swamp Sparrows appear, Bald Eagles passing north, small birds generally found in sheltered places from the wind.

10. Clear and frosty with south wind. Red-tailed and Red-shouldered Hawks flying plentifully, other birdlife generally quiet.

11. Dark cloudy with south-east wind and raining some. Red-wing Blackbirds begin to sing, Cooper's Hawks mating, Fox-colored Sparrows and Towhees appear, Meadow Larks common.

12. Clear with strong north-west wind, cold; a few Ducks flying, small birds generally quiet.

13. Dark cloudy with east wind; Red-tailed Hawks laying and sitting, Robins wonderfully plenty and Juncos numerous.

14. Clear with north-west wind; birdlife quiet.

15. Clear with south-west wind. Red-shouldered Hawks nesting, Juncos moving northward, Fox Sparrows common, Woodcocks appear, some Crows nesting.

16. Very light cloudy with south-east wind; Red-tailed Hawks flying very plentiful, Song Sparrows increasing, a few Ducks passing north.

17. Dark cloudy with south-east wind and some rain; birds on the stand.

18. Dark cloudy with gentle south wind and some rain; Robins and Flickers begin to sing, Towhees common.

19. Light cloudy with south-west wind, warm; Buffle-headed Ducks appear, birds in general very lively.

20. Light cloudy with north-west wind, clearing at noon. Turkey Vultures appear, Turtle Doves begin to coo, Pewees common, some Blue Jays looking for a nesting site while others are passing northward, Prairie Hens passing north, Belted Kingfishers common.

21. Light cloudy with north-east wind, cool. American Goldfinches and Marsh Hawks passing north, Woodcocks nesting, Cow-birds appear.

22. Heavy broken cloudy with north-east wind. Great Blue Herons and Sand-hill Cranes appear, Red-tailed Hawks very active.

23. Dark cloudy with strong north-east wind and snowing hard all day. Birdlife generally quiet, a few Sparrow Hawks sitting about on dead trees.

24. Clear with north-west wind, cold, 6 in. snow on ground. Birdlife quiet.

25. Clear with north-west wind, cool. White-rumped Shrikes appear, Bald Eagles flying over.

26. Clear with north-west wind, snow melting fast. Purple Martins appear, Purple Grackles, Marsh Hawks, Brant and Snow Geese passing north.

27. Clear with north-west wind. Wood Ducks and American Widgeons appear.

28. Dark cloudy with high south-east wind, thunder and rain. American Mergensers appear, a few Ducks moving about, Turkey Vultures increasing.

29. Dark cloudy with south-east wind; Bob-whites begin to sing bob-white, Juncos and Fox Sparrows wonderfully plenty, Field Sparrows appear.

30. Dark cloudy with east wind, thunder and rain at night; birdlife very quiet.

31. Dark cloudy with east wind and some rain, streams heavily swollen. Yellow-bellied Woodpeckers and Bartramian Sandpipers appear, Birdlife generally quiet.

BIRD MOVEMENTS FOR APRIL, 1897, AT SABULA, IOWA, BY H. J. GIDDINGS.

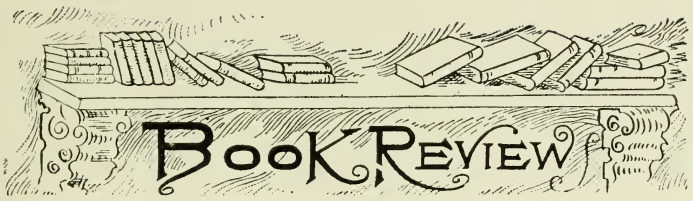
1	Purple Martins became common.		
2	First Field, Vesper and Chipping Sparrows and Yellow-bellied Woodpeckers.	Weather mild but not warm	Grass beginning to start
3			
4	First Orange-crowned Kinglet.		
5	Fox Sparrows increased.		
6	First Chewink, Fox Sparrows and Juncos very abundant.		
7	1st Ruby-crowned Kinglet, Winter Wren.	Cold and cloudy	
8	1st Cowbird, Fox Sparrows very common.		
9			
10	Last Tree Sparrow seen, first Tree Swallow all birds rather scarce.	10 snowed 7 in. 11 snow all went	Vegetation making but little progress
11			
12			
13			
14	Chewink common, next cowbird and a single Bank Swallow.	Wet and cold	Heard the first toad
15	Fox Sparrows getting scarce.		
16	No apparent change in bird movement.		
17			
18	Cowbird and Tree Swallow common.	Heavy S. wind	
19	First Whip-poor-will.	Wind N. W. and very cold and heavy frost	
20			
21	First Clay-colored Sparrow.		

22 23	First Brown Thrasher, White-throated Sparrow; Clay-colored Sparrow increased and Whip-poor-will became common.	Wind mostly south and warm.	Vegetation making rapid progress; trees budding.
24	First Catbird, Rose-brested Grosbeak, Purple Finch and Pine Warbler; White-throated Sparrow very abundant.		
25	First Myrtle Warbler, Chimney Swift and Kingbird.		Willows and soft wood leafing.
26	First Lark Sparrow, not much change in other species.		
27	First Red-eyed Vireo, Lark Sparrow increased, first Red-head Woodpecker.		
28	First Scarlet Tanager, Cliff Swallow, Golden Warbler, Long-billed Marsh Wren, Oven Bird, Baltimore Oriole.	Weather cold.	Vegetation stationary.
29	First Barn Swallow, Tanagers increased, Orchard Oriole.		
30	First House Wren, Barn Swallow increased Silver Tanager common.		

We acknowledge with thanks the receipt of letters of encouragement and the promise of a helping hand from a number of ornithologists. For the benefit of these and the many others whom we believe are willing to help in the work, but for some reason have neglected to send in monthly reports, we will say that we desire that all reports on the spring migration to be in by June 15th. Wake-up brethren, lend a hand. We have a state organization that is second to none, either in regard to number of efficient workers or in past accomplishments. Three years ago, under the most discouraging words from such men as Dr. Morris Gibbs (hope he will pardon the personal mention), our official organ first appeared. Dr. Gibbs said "an ornithological magazine with a state name cannot stand; it has been tried." Through the united efforts of the members of the I. O. A., the IOWA ORNITHOLOGIST is still in the field and retains its high standard of usefulness. We may point with a pardonable degree of pride to OUR magazine, which stands alone in many of its "originalities."

So far, so good. However, we live in the present, not in the past. It then behooves us to push forward toward new achievements. No work could be more commendable than a state manual similar to Ridgeway's "Ornithology of Illinois."

Is there one among us that, durnng his early days of studyings birds, did not look in vain for an inexpensive, yet accurate work on his chosen subject? Did we not in those days write to every one who was likely to know, inquiring if there was a work published on the birds of our state? There has been a long felt need for such a publication. Since the announcement that the I. O. A. had a committee preparing such a work, a large number of letters of inquiry have been received; questions as to "when will the book on Iowa birds be out?" What will be the price?" "If you are taking advance subscriptions for the work, book me as a subscriber." and so on. We cannot as yet make definite answers to these questions. We will state that the book will contain brief but accurate descriptions of all Iowa birds, in addition to the profuse notes on their life history, so that it will be of value to the beginner as well as the professional ornithologist. At the present time the committee is simply waiting for the return of the check-lists sent out, and to gather together complete data on the bird migration of the state for 1897. This will add much—if a sufficient number of the members will contribute—to the value of the list. Without delay, send to the chairman of the committee what notes you have on '97 spring migration of birds at your station, however meager it will be of value. DAVID L. SAVAGE, Ch'm.



New books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor, who will examine them personally and give them due consideration.

"The Story of the Farallones,"—A beautiful souvenir published by H. R. Taylor, editor of the Nidologist. This is a new and admirable departure from the usual routine of presenting scientific facts. The souvenir is illustrated by near 30 superb illustrations, printed on heavy coated paper which makes them show to the very best advantage. The text is written by C. Barlow in his usual interesting style, and as one reads, he imagines himself with the writer beholding the wonders of this densely populated city of the birds. The publisher spared no time or expense to make it an elegant publication. You may obtain it of Mr. H. R. Taylor, Alameda, Cal., for 50 cents.

"The Osprey, edited by W. A. Johnson, of Galesburg, Ill., has been favored with the co-operation of Dr. Elliott Coues, "the greatest of all living ornithologists." He will contribute a department under the heading of "Dr. Coues' Column." We extend our congratulations to Mr. Johnson in being able to obtain this new feature, which cannot otherwise than be a great attraction to his already popular monthly. The April number contains half-tones of Dr. Coues and Mabel Osgood Wright. The articles are all well written and of great interest ornithologically. Although yet in its first volume, the Osprey stands among the best of ornithological publications and is well worth the subscription price, $1 per year. It should be read by every bird student.

We were pleased to receive Bulletin No. 1, of the Michigan Ornithological Club, dated January, 1897. The M. O. C. is a pushing society of sixty-one members; eight honorary, thirty-seven active, and sixteen associate. Upon its membership roll are found the names of some of the most enthusiastic ornithologists in our country. This issue does not contain an article, note or news item but what was written by a member of the club. It is a credit to the bird men of Michigan and we wish it the success that its high standard so well deserves.

PUBLICATIONS RECEIVED.

"Biltmore Herbarium," C. D. Beadle, Curator, Biltmore, N. C., pp. 1-29.

"History of Paints, Pigments and Colors," Heath & Mulligan Mfg. Co., Chicago, 1897, pp. 1-72.

"The Story of the Farallones," by Barlow and Taylor, Alameda, Cal., 1897, 25 half-tones.

Auk, Vol. 14, No. 2; April, 1897.

Bulletin of Michigan Ornithological Club, Vol. 1, No. 1, Jan., 1897.

Canadian Natural Sience News, Vol. 1, No. 1, Mar., 1897.

General Notes, Bulletin Nos. 12-13, Wilson Orn. Chap. of A. A., Jan.-Mar , 1897.

Le Naturaliste Canadien, Vol. 24, Nos. 1-4, Jan.-Apr., 1897.

Museum, Vol. 3, Nos. 4-6, Feb.-Apr., 1897.

Nidologist, Vol. 4, Nos. 6-7. Feb.- Mar., 1897.

Oologist, Vol. 14, No. 3, Mar., 1897.

Oregon Naturalist, Vol. 4, Nos. 1-4, Jan.-Apr., 1897.

Osprey, Vol. 1, Nos. 5-7-8, Jan.-Mar.-Apr., 1897.

Popular Science News, Vol. 31, Nos. 3-4, Mar.-Apr., 1897.

NOTES FROM FOREST CITY, IOWA.

I have been trying for the past two weeks to secure photos of Prairie Chickens "drumming," or "cooing" rather. We have a blind built on a hill-top and while under it in the evening, have seen them within six feet of us, cooing, with wings drooping, tail spread and orange-yellow neck-sacs expanded.

Added one more species to my list April 17th; a female Winter Wren. Length three and eleven-sixteenths inches, wing one and eleven-sixteenths, tail one and one-quarter, bill three-eighths, and tarsus one-half.

R. M. ANDERSON.

EXCHANGE COLUMN.

Brief special announcements "Wants" "Exchanges," "For Sales," inserted in this department free to all members of the I. O. A., and to all subscribers of the IOWA ORNITHOLOGIST. Dealers can use these columns at regular advertising raters only.

FOR SALE—A fine collection of carefully prepared bird skins, all strictly first-class. Will be sold at any price. Send for list. Box 421, West Haven, Conn.

FOR SALE.—"Ferns and their Allies of Iowa." A neat pamphlet describing every known species and giving the distribution. Price 25 cents. T. J. Fitzpatrick, Lamoni, Ia.

WANTED—to exchange eggs in sets for same. Send lists. Will exchange a fine pointer puppy for eggs or books on ornithology or sell cheap for cash. J. H. Brown, Davenport, Ia.

WANTED BAD.—Nidologist, Feb, 1894, 50 cents; and Oologist, April, 1889, June, 1888, July-August, 1886, January February, 1887 and January, 1894, 15 cents each. V. L. Reed, Hampton, Iowa.

AMATEUR PHOTOGRAPHERS—Sends your films and plates to me for development and for printing and finishing. Best work, lowest living prices. Wilmon Newell, Photographer, Iowa State College, Ames, Ia.

FOR SALE or exchange.—Two magazine cameras $25.00 and $3.00; a navy pistol $12.00; an old fashioned revolver $9.00, both six shot; also a turning lathe for wood $5.00. Would like to have Indian war bow and arrows for lathe. Harry A. Harman, 311 D. and L. St., Danville, Pa.

INTERNATIONAL ENCYCLOPEDIA—in fine condition to exchange for books on ornithology. Baird, Brewer & Ridgeway and the Standard Natural History especially desired. J. H. Brown, Davenport, Ia.

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.....Premiums for Subscribers.....

The president of the I. O. A. made some premium offers in the last IOWA ORNITHOLOGIST, but owing to the late ess of that issue, it is thoaght best to extend the offer until May 1st.

THE IOWA ORNITHOLOGIST.

Is a first class publication. We have received many letters of recommendation from leading ornithologists, saying, "the magazine is worth much more than the subscription price," which is 40 cents a year. **Get your friends to subscribe for it.** You could easily win one of the following

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To the person who shall send us the largest number of subscribers (one new member to count as two and one-half subscriptions) before May 1st, we will give sets of eggs, with data, to the value of $5.00, including among others, a set of Krider's Hawk, ½.

SECOND PREMIUM—Eggs to the value of $3.00 including a set of Swainson's Hawk, ½, for second largest club.

THIRD PREMIUM—For the next 10 largest clubs, a set each of Black-crowned Night Heron, ⅛ to ⅓.

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JULY, 1897.

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Ornithology and Oology.

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CONTENTS.

Nesting Habits of Krider's Hawk, R. M. Anderson	31
The Affinities of the Mniotiltidæ, Morton E. Peck	34
The Pied-bill Grebe, Carl Fritz Henning	40
Effect of the Season on Migration, H. J. Giddings	41
The Prairie Hen, Wilmon Newell	43
Manchester, 1897	44
Book Review	45

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NEST AND EGGS OF KRIDER'S HAWK.

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NESTING HABITS OF KRIDER'S HAWK.

BY R. M. ANDERSON.

THE Krider's Hawk *(Buteo borealis kriderii)* is a geographical variety of the Red-tailed Hawk and is the lightest in color of the five sub-divisions of that species known to inhabit North America, occuring in the region from the Rocky Mountains to the Mississippi River, though very seldom found east of the Mississippi. This species is described in Ridgway's Manual of North American Birds as "lighter colored than the Red-tail, with much white on upper parts, tail pale rufous (usually without the dusky sub-terminal bar), the lower parts entirely pure white or pail buffy only on thighs etc., with little if any spotting on belly. Eggs 2.31 x 1.80. Habitation, Great Plains, Minnesota to Texas; east irregularly or casually to Iowa and Northern Illinois."

The first record of this species on the Atlantic coast was a specimen taken by W. W. Worthington at Supelo Island, Ga., February 16, 1888, identified by Wm. Brewster, (Auk, January, '89). In Southern Minnesota Mr. P. B. Peabody found several nests of the species during the spring of 1894, (Auk, January, '95). My first meeting with Krider's Hawk was on the 14th day of May, 1895, when I went out to visit an old nest which had been known to me for about three years and had been occupied by a pair of Swainson's Hawks the previous year. As I came near the tree, a large Hawk flew silently off the nest and away. She perched on a tree at some distance and occasionally uttered a scream as I was examining the nest, but when I started to climb down, the male Hawk also appeared on the scene, and while he perched on a tree some distance away, the female Hawk circled over my head within easy gun range, screaming angrily, then lit in a tree only two or three rods from the nest and remained there until I had reached terra firma, when she circled once around the tree and alighted again in the same place, only to drop at the report of the double-barrel.

For some time I thought my specimen to be only a light phase of the common Red-tail, but after an inspection of a large series of Hawks at the Smithsonian Institution and a conversation with Mr. Robert Ridgway, I concluded that the bird was none other than Krider's Hawk. I afterward sent it to the Smithsonian where the conclusion was verified, the bird being identified as *Buteo borealis kriderii;*—now at the Smithsonian Institution, accession 30869. This Hawk was much lighter than a Red-tail in my possession, the whole under parts being whitish with but a few brown streaks on belly, head streaked with dull light-brown and white, cheeks whitish, back and wings considerably mottled with pale and dark-brown and whitish. The tail was pale reddish brown, fading to a buff or creamy white near base; upper tail

coverts white. Iris, brown; feet, light-yellow; cere, pale greenish-yellow. L. 24, W. $15\frac{3}{4}$, T. $10\frac{3}{4}$.

The nest was a large bulky mass of sticks, the accumulations of years, and was lined with strips of bark and cornhusks; also containing a sprig of cottonwood or poplar with fresh green leaves, evidently just picked, and two other sprigs with the leaves somewhat withered; built fifty-one feet from the ground on a slanting Burr-oak tree. It contained two eggs advanced in incubation. The eggs resembled eggs of the common Red-tail, one egg being sparsely specked with light brown, the other with a number of large blotches of clear brown, chiefly around the larger end. Size, 2.44 x 1.94; 2.43 x 1.91.

May 2, 1896, in Ellington township, Hancock county, in company with Mr. Earl Halvorsen, I again found the species "at home." The nest was in a Burr-oak tree, fourty-six feet from the ground. The Hawk remained on the nest until I had rapped on the tree several times with a stick, when she flew off, circled around a few times and lit on a branch near the nest, in the same tree, before my companion had climbed up twenty feet. She sat there for nearly a minute, giving ye ornithologists a good view of her. The other Hawk arrived shortly after and they soared overhead uttering shrill screams, both Hawks finally settling in the same tree, about two feet apart, and remaining there while we were taking the accompanying photograph of the three beautiful eggs and nest "in situ"—a rather difficult feat, as the branches above the nest were exceedingly slender and much too flexible for a comfortable support. The nest, an old one, was about two feet across and built of sticks and one cornstalk. The hollow of the nest was about nine inches across and was lined with strips of bark and a quantity of fine stringy bark, such as squirrels' nest are usually lined with. The nest contained a number of White Poplar twigs with young green leaves, also a number of bunches of soft white down. The eggs were beautifully marked with umber brown, yellowish brown and lavender and were slightly incubated.

April 26th, 1897, I took a set of three slightly incubated eggs, about two miles north of Forest City, from a nest $37\frac{1}{2}$ feet from the ground on an outspreading branch of a Burr-oak tree. The nest was built this spring, of coarse Poplar and Oak twigs and lined with strips of bark and cornhusks, the lined part measuring about ten inches across and depressed about two inches. The eggs were whitish with small specks of dull brownish scattered over nearly the whole surface. The Hawk could be seen on the nest as I approached, but flew away when I was several rods from the nest, remaining away until I had climbed up to the nest, when she flew high overhead screaming a few times. For some time both Hawks sat near together on the same tree. Both Hawks were very wary and kept out of reach of the shotgun, which plan was certainly very conducive to longevity.

The following Saturday, May 1st, I went down into the Ellington woods. Passing by an old nest from which I had taken three eggs of the Red-tail, May 3, 1895, and three Great Horned Owl's eggs, February 22, 1896, nothing was visible but a pair of Swainson's Hawks soaring and screaming overhead. However I struck the tree with my climbing-irons and was somewhat surprised to see a Hawk dash off, whose pale reddish tail and whitish under parts showed it

to belong to the variety *kriderii*. Climbing the forty-eight feet intervening between the ground and the nest, I found it to contain three quite heavily marked eggs. The Hawks both soared high overhead screaming, but were very wary, and after waiting half an hour vainly hoping to obtain a specimen, I left the place, returning about six hours afterward. As I was crawling through a barbed-wire fence about a rod from the tree, the Hawk darted off the nest, and as she soared away I fired both barrels of the gun and she sailed down at an acute angle, being stone dead when picked up. This Hawk measured: L. 22, W. $15\frac{3}{4}$, T. $9\frac{1}{4}$. The stomach was entirely empty. The three eggs were slightly incubated. The nest was lined with what looked like old nests of Yellow Warblers and the like, hempen fibres, hair, etc., also a green Poplar twig.

The accompanying photograph is a view of the nest taken from the ground on February 22, 1896, at which time it contained three eggs of the Great Horned Owl. The picture shows the height to which the writer had climbed (about 36 feet from the ground) before the old Owl would fly from the nest.

On the same day I took another set of their eggs from a nest 35 feet up in a Black Oak tree. The nest was an unusually large one, nearly three feet across and two feet high, composed of sticks and twigs of Oak and Poplar (principally the latter) and lined with bark and cornhusks and some green Poplar sprigs. The hollow of the nest was about five inches deep. The three eggs were pale bluish, nearly unmarked and slightly incubated. The Hawk left the nest as I came near, was soon joined by her mate and they flew overhead frequently uttering a shrill "scree-ee." They would occasionally light in trees, but I could not come very near to them.

A peculiarity of this species is a fondness for having green leafy twigs in the nest (especially twigs of Cottonwood and White

Poplar), all nests which I have examined having one or more green sprigs. These sprigs must be renewed almost daily as they almost always appear fresh, withered or dead leaves being rarely found in the nest. This eccentricity seems also to be shared by the Swainson's Hawk (*Buteo swainsoni*).

THE AFFINITIES OF THE MNIOTILTIDÆ.

BY MORTON E, PECK.

Paper read before the Second Congress of I. O. A.

TO arrive at even an approximately correct conclusion as to all the relationship, near and remote, of any group of vertebrates, there is needed, not only a thorough examination of the life history and external ordinal family, generic and specific characters of every genetically related family, but also a careful anatomical survey of these families, The most important data for such conclusions are obtained from those aberrant or generalized types which unite some important features of two or more divergent groups. These so-called connective types are such as have preserved, in a more or less modified condition, some important structural points derived from remote ancestors less highly specialized than their living decendents. Among mammals such forms are the Lemurs of Africa and the curious Mouse Deer of Borneo. Among birds the Secretary Birds of Africa and the anomalous Hoazin of South America come under this catagory.

As we proceed to the more specialized forms, the affinities become more intricate and puzzling within a limited sphere. With the generalized types, the case is different. They are usually found to connect two or three very widely seperated groups, but with no other evident connections. For example, the Secretary Bird is between the raptorial and wading birds, being placed doubtfully with the former. Beyond these two families it seems to possess no near relationships.

As we are to deal with one of the most highly specialized families of birds, and therefore one presenting the most numerous affinities and in the most varying degrees, it is unnecessary to say that no full treatment of the subject will be attempted; anatomical points will not be touched upon, and only the more salient external features briefly reviewed.

The Mniotiltidæ, or American Wood Warblers, are a well-defined family of small passerine birds, divided usually into eighteen genera, which comprise about one hundred and twenty species, though the exact number is not yet fully determined. Most of the species are elegantly formed and highly colored, graceful and active in movement, but rather weak in structure. The individuals are usually abundant, but a number of species are extremely rare. Geographically they are principally confined to North America, with but few distinctive South American forms. The most typical genera are those migrating across the United States.

Probably the most natural way of presenting the subject in hand is to take up each genus seperately and trace its relationships to other groups, if such are found to exist. The necessity for proceeding by genera will at once be evident. An isolated species will frequently not show sufficient grounds for assigning it any particular place relative to some other family, while genera will usually be found to grade from the main family type toward some other. The order here followed is that given in Ridgeway's "Manual."

Mniotilta, of which the Black and White Warbler is the only species, is very distinct from the rest of the family in several important points, the most noticeable of which is the position of the head relative to the line of the vertebral column; that is, the beak falls almost in the line of the spinal axis. The latter is slender and has a very decided curve. These points, together with the bird's mode of life, show at once a close relationship to the Coerebedæ, or Honey-creepers of tropical America. Certain species of this family lean strongly toward the Mniotiltidæ, so that there is a point where the branches of the two nearly meet. The Coerebidæ are not a highly specialized family and in Mniotilta we find, as we might expect, many generalized characters, likewise.

The genera Protonotaria and Helinaia show no determinable affinities to any other family; the family type reaches in them, therefore, a very high development. In both, the bristles about the gape are wholly wanting and the bill is strongly developed. In Protonotaria it is long, stout and slightly compressed; in Helinaia it is long, very acute and much compressed. Swainson's Warbler, the only species of the latter genus, has an indistinct line of yellowish or whitish on the forehead. The closely allied genus, Helmintherus, of which the Worm-eating Warbler is the only species found in the United States, has the bill but slightly compressed and the culmen considerably curved. The crown-markings, of which there was but a slight trace in the preceeding, here become very prominent in the broad buff and black stripes extending over the entire head. These head-markings are characteristic of the family in its fullest development.

Helminthophila has the gape-bristles small or wanting and the bill small and very acute, with no curve. Crown-markings are nearly always present, though often partially concealed; they are wanting, however, in the Tennessee Warbler. The Blue-winged and Golden-winged have a patch of bright yellow covering the entire crown. Backman's Warbler has a black band across the anterior portion of the crown, and in the remaining species of the genus the crown-patch is orange, brown or chestnut. Yellow or yellowish-white wing-bands are sometimes present. In this genus cephalization of coloring, a peculiarity of the family, reaches its maximum, though the most brilliant colors have not yet been reached.

A tropical and sub-tropical genus, Oreothlypis, stands very close, structurally, to Helminthophila, the chief point of seperation being the slighter difference between the comparative length of wing and tail relative to the length of the tarsus. The species *gutteralis* of this genus is plumbeous above with a triangular patch of black on the back; the chin, throat and breast are orange. In the species *superciliosa* the rump and back are olive, the throat and breast yellow, the chest with a chestnut spot.

In Compsothlypis the triangular black dorsal patch of the typical Oreothlypis is replaced by a similar patch of bright olive-green. In some species this is dull and indistinct. The Parula Warbler has, instead of a single chestnut spot on the chest, a large patch of mixed chestnut, black and yellow, with a patch of chestnut on either side of the breast. Oreothlypis has no white wing-bars, while in Compsothlypis these are usually broad and prominent; they are wanting, however, in the Central American Parula, and are very narrow in the Socorro Warbler. It is therefore seen that while structurally Oreothlypis stands very near Helminthophola, in coloration it grades as strongly toward Compsothlypis. Such closely connected genera are characteristic of all highly specialized families.

The genus Dendroica is the largest and most important of the family. It is here that the Warbler type, both in structure and coloration, reaches its perfect development. The most plainly colored species are those whose generic characters are doubtful or not strongly marked. The beak is stouter and less acute than in the three preceeding genera and the bristles about the gape are well developed. The species present such an endless variety of markings that it is difficult to trace any particular pattern running through all. The sides of the breast, however, are nearly always streaked with black, blue or olive on a paler background. Wing-bars are present or represented in nearly every species; in the Palm, Prairie, Kirtlands and Cuban Pine Warblers, however, they are wanting. In the Yellow Warbler they are merely indicated by the brighter color of the tips of the wing-coverts. Two species, the Yellow-throated and Palm Warblers, barely hold their place in the genus, and the latter at least should probably be seperated. The Yellow-throat has the beak large and much compressed and quite acute, with the bristles very small. The Palm Warbler leans strongly toward Seiurus in many of its habits and both species resemble Seiurus in having the tail nearly as long as the wing. These points are not sufficient grounds for placing them in that genus, however. If seperated from Dendroica, they should stand between the two in a new genus.

Seiurus presents some characters which are very suggestive in tracing the affinities of the family. The genus embraces four species, three of which are North American, and all of them large, stout Warblers, plainly colored, with a close external resemblance to the Thrushes, whence their names. They are all terrestrial in habits, seeking their food principally on the ground. In general character they do not differ greatly from the preceeding genus. The tail is never much shorter than the wing and sometimes longer. The plumage is plain olivaceous or brown above and whitish beneath, conspicuously streaked with dusky. The crown may be streaked as in the Oven Bird, or plain. In habits this genus so closely resembles the Motacillidæ, or Wagtails, that some of the older ornithologists placed them in that family. It is true that the mere mode of life of any animal is usually regarded as of little or no value in fixing its place in a system of classification, yet within certain limits of structural resemblance, strongly marked habits should not be disregarded. In this case the movement of the tail and the ambulatorial gait in walking show an unmistakable close genetic connection with the Wagtails. The structural differences consist mainly in the great lengthening of the tertials, tail and hind claw of the

latter, but Seiurus shows some tendency in this direction, which, taken with the foregoing features, seems sufficient to establish the relationship beyond question. The beak in Motacillidæ is very variable, and in some cases does not differ greatly from that of Seiurus. In coloring there is little to suggest relationship.

It is here in place to mention the uncertain affinity existing between the Mniotiltidæ and the immense family of Sylviidæ, which embrace the Old World Warblers and our Kinglets, Gnatcatchers and Kennicott's Willow Warbler The Sylviidæ are such a heterogeneous and ill-defined family that it would not be practicable here to enter into a discussion of the degrees of similarity between the various branches of the family and Mniotiltidæ. Seiurus is the only genus with which we can allow them any connection, and here too may be mentioned some vague relationship with the Turdidæ, or Thrushes, and Cinclidæ, or Dippers. These affinities are all so hypothetical that they cannot be said to greatly influence the relative position of the family.

In external characters the genus Geothlypis stands not far from Seiurus. The comparative length of wing and tail is about the same and the latter is rounded or graduated in both. The habits of the two genera present some similarities, among which may be mentioned the movement of the tail, which is very noticeable in the Kentucky Warbler. The colors in Geothlypis are usually bright and the plumage not streaked.

Icteria, of which the Yellow-breasted Chat is our only representative, is a widely aberrant genus and might almost be placed with the Vireos. This is the largest species of the family. The beak is short, stout and compressed, with the culmen strongly curved and a sharp ridge running more than half its length. The upper mandible curves over the lower, as in the Vireos, but is not hooked. It also resembles the latter in the well developed bristles and in the proportionate length of wing and tail. There is a very striking similarity between the coloring of the Chat and that of some Vireos, for instance, the Yellow-throated. Besides its Vireo affinities Icteria seems to show some genetic connection with the Tanagers, but this is more evident in the two following genera.

Teretistris, a genus comprising but two species, both confined to Cuba, has the beak stout and strongly curved as in the Tanagers, though not notched, and plumage inclined to yellowish or green as in many of the latter family.

Granatellus, a Mexican genus, has the beak more as in Icteria, but the plumage beautifully varied with plumbeous red and white.

Sylvania and Setophaga may be taken together as the two genera, structurally, related very closely to the Tyrranidae. Sylvania does not greatly diverge from the family type except in the marked development of the bristles about the gape and the broad, depressed beak; there is nothing suggestive about the coloring. These structural characters are greatly emphasized in Setophaga; in fact, some of the Redstarts have almost the typical Empidonax beak. In habits they are essentially tyrannidine. The coloring suggests little, though red is more characteristic of certain Flycatchers than of the Warbler family.

The two genera Cardellina and Ergaticus bear a strong resemblance to the Paridæ, or Titmice, in the structure of the beak and length of tail, but it

would scarcely be safe to say that there was any close genetic relationship between them.

Basilenterus and Euthlypis seem to point back to the Setophaga type with Flycatcher affinities, though in plumage they resemble the more highly specialized genera.

This completes the list of genera and probably all the near alliances have been touched upon, though of course it cannot be claimed that each has been given its due prominence.

Perhaps no other well-defined family of birds shows more varied and intricate relationships; they embrace a considerable number of widely separated families in both sub-orders of the Passeres.

Let us now turn for a moment to the geographical distribution of the group and afterwards draw our conclusions as to its probable origin and past history.

The absolute range of the Warblers extends from the arctic region to Chili and Bolivia, but comparatively few species cross the equator. Now, leaving out of account the annual migrations of the northern species and considering the breeding range as the true habitat, the whole territory of the family may be divided into two well-defined regions. The boundary line between these regions extends from the coast of Texas about one hundred miles north of the southern boundary, through southern New Mexico and Arizona, reaching the Pacific Ocean at the southern extremity of California. It will be seen that this line is at least a thousand miles north of the southern point of the Nearctic Rgion as defined by Wallace in his "Geographical Distribution of Animals." Not only the species, but also the genera are almost wholly different in these two regions. This will be clearly shown by the following tables, the genera with the number of species characteristic of each region being given with the number of species found in the other.

NORTHERN REGION.

Genera.	*Total No. of species.*	*Species confined to northern R.*	*Species common to both.*	*Species confined to southern R.*
Mniotilta	1	1		
Protonotaria	1	1		
Helinaia	1	1		
Helminthophila	8	7	1	
Dendroica	36	21	2	13
Seiurus	4	3		1
Icteria	1	1		
Sylvania	5	3		2
Total	57	38	3	16

SOUTHERN REGION.

Genera.	*Total No. of species.*	*Species confined to southern R.*	*Species common to both.*	*Species confined to northern R.*
Oreothlypis	2	2		
Compsothlypis	6	5		1
Geothlypis	11	7		4
Teretistris	2	2		
Granatellus	4	4		
Setophaga	15	14		1
Cardellina	1	1		
Ergaticus	2	2		
Basileuterus	22	22		
Euthlypis	1	1		
Total	66	60		6

These figures are very interesting and significant. In the first place, they show a well marked geographical division of the family into two nearly equal parts or sets of genera. Further, it will be noticed that the four most highly specialized genera, Protonotaria, Helinaia, Helminthophila and Dendroica, are characteristic of the northern region, though thirteen of the thirty-six in the last are confined to the southern. Oreothlypis and Compsothlypis, the most

highly specialized of the southern genera, still stand considerably below these four. Again, all those numerous forms showing Flycatcher affinities, with the exception of three species of Sylvania and one of Setophaga, are confined to the southern region.

Now it will be remembered that the order of Passeres is divided into two sub-orders, Clamatores and Oscines. The former of these embraces but two families, the Tyrannidæ and Cotingidæ the Tyrannidæ may be taken as the type of the sub-order, as they show, in general, less affiliation with the Oscines.

Finally, as regards the origin of the Mniotiltidæ, the consideration of these facts would lead us to adopt one of two theries. Either they originated somewhere in the southern region and at a period not much subsequent to the separation of the order of Passeres into the two sub-orders, considering the close affinities of some genera with the Tyrannidæ, from which starting point the more highly specialized genera moved northward into temperate America, while the more generalized forms, those retaining the tyrannidine characters, remained in the southern region; or on the other hand they originated in the manner in the northern region and the tyrannidine types, with other less specialized genera, moved southward. From the fact that the whole sub-order Clamatores, with the exception of a comparatively few species of Tyrannidæ, are confined to the southern region, we would at first be led to conclude that the birth place of the family must have been there, but a closer consideration of the facts go to prove the contrary. It is generally believed, from a broad study of distribution, that the Passeres originated in the north temperate zone, where nearly all of the most highly organized forms of animals took their rise. The Passeres are the most perfectly organized and specialized of all birds and there is little reason to doubt that they follow the general rule. Again, let it be remembered that the Mniotiltidæ originated not very long subsequent, in all probability, to the seperation of the order into the two sub-orders, therefore before a general movement southward is likely to have taken place. Further, it is reasonable to suppose that where great physical changes would not necessitate a universal migration, the most highly speciallzed forms would be found where the family originated, for as species and individuals became numerous and the struggle of life more severe, those adapting themselves most readily to conditions, that is, those becoming most specialized would drive out the less adaptable, that is, the more generalized, which would be compelled to migrate into localities not yet occupied by species having a similar mode of life. It is probable that at the time the Mniotiltidæ became a seperate family, a much warmer climate prevailed over the northern hemisphere than at present, but as the climate became more rigorous, the less hardy forms, which are of course the more generalized, would be driven southward, along with most of the Tyrannidæ, into those tropical regions where we now find them. In this movement would also be included most of those showing close relationship to the Tangaridae, which are very susceptible to cold.

But, it may be asked, how are we to account for a number of highly specialized forms in the southern region and of generalized in the northern? It seems surprising rather that there are not more of these exceptional cases than really exist, when we come to consider the immence migratory range of the family.

Nearly all the northern species in their southward migration pass into Southern Mexico, Central and South America. Abundance of special kinds of food and other favorable conditions in their winter home may have induced individuals to remain there occasionally through the year, and so, the habit once formed, migration northward would gradually decrease and finally stop altogether. Similarly, individuals of southern forms might have pushed northward by degrees, led on by favoring conditions, till at last whole species would be induced to migrate and their present range would be reached. Such changes of habitat have gone on even under human observation.

Such seems the most plausible theory of the origin, past movements and present distribution of this most interesting family of birds. Further research and by more experienced students of distribution may give a simpler and more satisfactory solution of the intricate problems here briefly touched upon, as also further anatomical companions may reveal much that is new and valuable in regard to the relationships before discussed, but for the present we will be compelled to rest on these results of a few somewhat superficial and hasty observations and researches.

THE PIED-BILL GREBE—(Podilymbus podiceps.)

BY CARL FRITZ HENNING.

THE Pied-bill Grebe, or Hell Diver as it is commonly called, in this locality is known to almost every boy. Arriving here during the first week in April, they remain with us until late in October. When we have an early spring, the dalchick makes his appearance in March.

In the spring of '94, trees and shrubs were budding by the 9th of March and our friends the Bluebirds warbled their notes of joy from the tree-tops. By the 25th we had a cold snap and on the 26th a farmer boy brought a Pied-bill Grebe into our store, having captured it that morning in a pond frozen in the ice—making it neccessary for the boy to cut the ice around the Grebe with a knife to release the poor bird from its icy prison. During the spring and fall migrations the Pied-bill Grebe are plentiful, hundreds feeding at Clear lake and Cairo lake (Mud lake) in the adjoining counties north. In Boone county, they breed in suitable localities—nearly every large marshy pond has a pair of these truly beautiful Grebes.

All the nests that I have found were uniformly formed of partially decayed reeds, rushes and grasses, mixed with mud and debris brought up from the bottom of the pond. The nest is usually fastened to acquatic plants and oftenest placed where the water is deepest, but so well concealed that it is rarely found. The number of eggs in a full set is usually seven, rarely nine. In the IOWA ORNITHOLOGIST, Vol. one, page 44, my fellow member John V. Crone says: "The eggs are almost invariably found covered and incubation most likely proceeds without the aid of the parent bird." My brother ornithologist may have found more nests of the Pied-bill Grebe than I, but my observations differ from his. The eggs that I have found were only partially covered and several nests with

eggs that I have found lately were not covered at all. A fine set of nine (9) collected by myself May 20th of this year in a pond half a mile east of my home did not have a single grass blade for covering.

When feeding, the Grebes stay away from their nest a long time, often going long distances to find their favorite food, and may then cover their eggs with decaying vegetation in order to keep them warm until their return to the nest, or when alarmed she may hastily cover the eggs for protection, but I hardly think that the eggs are incubated by "heat generated by the decaying vegetation which usually composes the nest," although most writers claims this to be a fact. In a letter received from my esteemed friend Dr. Elliott Coues, Washington, D. C., January 28th, 1894, in reply to my inquiry regarding the nesting and breeding habits of the Pied-bill Grebe, writes me as follows: "The Grebe you name hatches its eggs mainly by animal heat to which that of decaying vegetation can add but little if any."

EFFECT OF THE SEASON ON MIGRATION.

BY H. J. GIDDINGS.

IN studying migration, one of the principal questions to present itself is the effect of the season on the movement of the different species. And that the changes in the season, one year with another, does influence the movement of the different species is well proven. Although what that power is which compels the various species to take up their annual march with the season each year, verying from a short distance in some species to thousands of miles in others, still remains undiscovered. In my opinion this impulse can be partly accounted for by the general restlessness of the different species which causes them to be continually on the move, except during the breeding season.

The present season has been remarkable here for the large portion of cold weather intersperced with a few warm spells of a few days at a time, which would lead us to look for some unusual effect upon migration, and that is what we find, at least with regard to some of the less hardy species. On a comparison of my notes of the present season with those for the past eight years I find that while stragglers of a good many species came as early as usual, the bulk of most species did not follow as closely behind the first as usual, and a few species which usually summer here in quite considerable numbers have almost failed to put in an appearance.

With regard to the Warblers there wasn't any time when they were present in any great numbers, but came straggling along a few at a time and never enough present at one time to make much of a showing, and what were present were unusually quiet. All of the more hardy species came about as usual and at about the average time. The following is the date of arrival of some of the most common species that arrived at about the average time: March 10, Mallard, Pintail, Robin, Bluebird; March 11, Canada Goose, Meadowlark, Wilson Snipe, Rusty Grackle; March 12, Redwing Blackbird; March 14, Bronze Grackle; March 16, Song Sparrow; March 22, Phoebe, Flicker, and a single

male Purple Martin, which was the earliest record for this species that I have ever made and not withstanding that the weather turned very cold and there came two snow storms after that, he remained right along; March 29, White-rumped Shrike; March 30, Fox Sparrow; April 1, Field, Vesper and Chipping Sparrows; April 19, Whippoorwill; April 22, Brownthrasher; April 28, Scarlet Tanager. I give the above as a sample of the species that appeared at about the usual time and became common in the usual time after arrival. This is only a partial list of such species, but enough to illustrate the point. The following species came straggling along: Towhee, first seen Apr. 6, which is very late for this species; did not become tolerably common until Apr. 14 and was not present in its usual numbers before the last of the month. Cowbird, first seen Apr. 8, about an average date, but they did not become fairly common until the 18th and was not present in the usual numbers before the 24th inst. Red-eyed Viero, first seen Apr. 28, straggled along until May 12 before it was fairly common, and is not present in its usual numbers yet, June 19. Golden Warbler, first Apr. 28, tolerably common May 7; this species usually comes nearly in a bulk. Black and White Warbler, first seen May 1; no more until May 14, never appeared common. Orchard Oriole, first Apr. 29, a single bird; was not common before May 10. Baltimore Oriole, one bird seen Apr. 28, no more for several days; did not arrive in the usual number until May 12; this species usually arrives nearly in a bulk. Dickcissel, first, a single bird May 5, next a single bird May 9, became common about a week later. Chestnut-sided Warbler was not seen until May 6, a late date, and was only fairly common three days later, and the bulk of the species did not appear for some time after. Tennessee Warbler did not make its appearance until May 10, a very late date for this species, but they all came at once and were present for ten days. Yellow Throat was not seen until May 15, the latest date for the species I have ever recorded, and then they did not become common before the 20th. Yellow-billed Cuckoo, was not seen before May 11, when a single bird was seen, but no more until May 20, and only a very few has been seen this season. Wood Pewee, first seen May 16, about ten days later than the average; they were common three days later. Ruby-throated Hummingbird, first seen May 12, not much behind the average, but with the exception of a few stragglers, the species was not present until two weeks later when they became common. Heretofore I have always found this species common at the time of the flowering of the wild Columbine, but this year the Columbines were in full bloom when the first arrived. Bell's Vireo, one was seen May 10 and another May 14 which is all of this species that I have seen the present season. Heretofore this has always been a common breeder here. Yellow-breasted Chat, first seen May 9 and a few more May 16. This bird also has failed to locate in their usual haunts and up to the present time I have failed to find a single pair nesting, nor have I heard a bird for some time. Kentucky Warbler has nested here during the past few seasons, but this year none have been seen or heard. This being about the northern limit of this species, doubtlessly it has not advanced this far the present season. I think the foregoing examples, although but a few, will serve to show that the season just past had an unusual effect upon the movements of some species.

THE PRAIRIE HEN—(Tympanuchus americanus).

BY WILMON NEWELL.

THIS beautiful game bird is a native of the Mississippi valley from Louisiana to Minnesota, and from Wisconsin on the east to New Mexico and Nevada upon the west, being most abundant in the western and north-western portions of this area. This bird is well known to naturalists and ornithologists and there are very few collections that do not contain one or more specimens. For this reason a description of the bird is here unnecessary.

The Prairie Hen is a common resident throughout the state of Iowa, but is most abundant along the northern and western borders. Fifteen years ago the Prairie Chickens (commonly so-called) were exceedingly abundant in Sioux county, but for several years sportsmen from Minneapolis and Chicago made this locality their headquarters. The consequences were that the chickens suffered great slaughter and were very nearly exterminated. Of course this scarcity soon disposed of the city sportsmen and their machine guns. The chickens have suffered very little from the local nimrods and have of late years steadily increased. At present (making a rough estimate) we have an average of from four to eight chickens per square mile. Of course I do not say that you will find chickens upon every section, for the habits of the bird would knock this theory out of the box.

During the winter the chickens gather in flocks of from twenty to seventy-five, each flock ranging over an area of from four to six square miles. They are exceedingly wary during the winter and it is impossible to get within gun-range of them. Occasionally a single bird will become separated from the flock, and in such cases the bird may sometimes be flushed from the grass or stubble and thus be secured. Throughout the winter they feed upon corn, wheat and such chance grains as they may find. The cornfields however are their main reliance. At this season they roost in the bunchss of long slough grass or in the snow in the immediate vicinity. Each bird will hollow out for himself a hole in the snow, merely large enough and deep enough to nicely protect him from the wind. Here he stays over night as snug and warm as you please. It would seem that the drifting snow would cover and suffocate them but I have never known of such a case, probably because the roosting places selected are comparatively open and there is very little to hold the snow. At this season of the year the Prairie Chickens suffer very little from their natural enemies, but many are killed by flying against telegraph wires and barbed-wire fences during heavy snow storms or high winds. The Prairie Chickens remain in flocks until the breeding season and then separate. As soon as spring opens the continuous "Bom-Bom-Boo-o" of the roosters and the cackle of the hens can be heard any morning in the neighborhood of an upland meadow, and to the naturalist and lover of Nature it is music indeed.

The Prairie Hen nests in the tall slough grass as a rule, but I have often found nests in tall stubble. Occasionally a nest is found in an exposed position, where there is little or no grass. Before the north-western part of the state was

settled up, the birds nested upon the uplands as well as in the sloughs and when the prairie was burnt over in the spring thousands of eggs and even many of the old birds were destroyed. After such fires I have seen as many as four nests to the acre on an average. The eggs are sometimes used by the farmers for food. The nests are built between the middle of April and the forepart of May. However the time will vary, owing to whether or not the spring is warm and dry. The number of eggs in a clutch varies from six to twelve, seven or eight being the average number.

The young chickens when hatched are beautiful downy little fellows, white with markings of brown. They are ready for business as soon as they get out of the shell, and the way they start off on their little legs is surprising to say the least. If the eggs are hatched under a tame hen the young birds will pay absolutely no attention to their new parent and as soon as they get a chance they start off on a steady trot, with a determination to get away at once. Pick one up if you will, as soon as you put him down, away he goes. I have tried to keep them by putting them in a large grassy space inclosed with boards but it won't work. The little fellows will start that steady dog-trot and they'll make a beaten path around the inclosure in a few hours. They refuse to partake of food in captivity and of course their steady running soon kills them. After trying all sorts of schemes to domesticate the Prairie Hen I have long since given it up with disgust and common sense.

As to how the chicks act when hatched under their natural parent I am unable to say. However I have observed a mother hen with her chicks upon several occasions. The mother hen in her habits greatly resembles our own tame biddy. She hunts food for her family of ten or a dozen and keeps them around her with a peculiar "cluck" which differs much from the clucking of a tame hen. If alarmed, the mother hen gives a quick, warning cry and like a flash the whole family, mother and all, will be scattered far apart and each one will be snugly hidden in the grass. While the chicks are small and unable to fly the family rarely leaves the tall slough grass. About July 1st the young birds are able to fly short distances and they then betake themselves to the fields of uncut grain. By Sept. 1st all the birds are expert flyers and now doth the sportsman appear to work damage among them. The flock stays together until winter time when all the chickens of a neighborhood gather together in a single flock.

MANCHESTER, 1897.

YOU WILL BE WELCOME.

THE Iowa Ornithological Association will convene August 11-12-13, 1897, in the Congregational church at Manchester, Iowa. This, the third congress, promises to be far the best attended, and therefore the most interesting, of any meeting ever held by Iowa ornithologists.

The congress will open with an informal session, Wednesday morning, Aug. 11th, for the purpose of becoming personally acquainted with each other and

for discussing any subject pertaining to our chosen study—ornithology—that may present itself at the moment. This cannot fail in being one of the most enjoyable and profitable meetings of the congress and members should make every possible effort to arrange their work so as to be present at this session.

At the following sessions the Association will proceed with the reading of scientific papers—i. e. ornithological—which will be of consummate interest to all present. All members that attend will participate in the discussions which follow the reading of each paper. Among the subjects that will be presented will be found "The Use of the Camera in Ornithological Observations," "The Closely Related Spices of the Wrens and Shrikes," also many others of equal interest. One session will be given over to the discussion of "Ways and Means of Observing and Collecting Ornithological Specimens and Taxidermical Work." Every member will come prepared to give at least one new "wrikle" in collecting and preparing material or on observations.

The report of the compilation committee, with following discussions, will form a session of not the least interest. It is anticipated that before another congress the catalogue "Birds of Iowa" will be ready for publication. The question of how, when and where will this be published will be thoroughly discussed and a decission passed. The public session will not be omitted, at which a number of papers of both a popular and scientific nature, will be read.

It is designed to make this one of the greatest scientific meetings ever held within the state. The leading ornithologists of Iowa will be there and all cannot fail to be benefited by what they hear.

New books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor, who will examine them personally and give them due consideration.

"Some Common Birds" in their relation to agriculture, by F. E. L. Beal. This is a continuation of the inestimable work being done in economic ornithology by the Biological Survey of the U. S. Dept. of Agriculture. This bulletin contains the results of systematic investigation of the food habits of about 30 of our grain and insect eating birds, belonging to ten different families. The limit of the bulletin precludes giving more than a very brief statement regarding the food of each species. The past investigation of this department has placed an economical value on birds that were previously thought to be injurious in their relation to agriculture. May this systematic work be continued, for indeed more commendable work could not be done than to teach the agriculturitts which are his feathered friends and how to protect them, as well as how to guard against the attack of his foes.

"Cooke's Birds of Colorado." The work sets fourth the present knowledge of the distribution and migration of Colorado birds. There is also included a bibliography of the subject and an historical review of the progress of ornithological investigation in the state. The total number of species and varieties of birds known to occur in Colorado is 360, of which 228 are known to breed. This is a larger number of species than has been taken in any state east of the Mississippi, and is exceeded by only one state of the Union, that is by Nebraska by nearly 400 species. The copiously annotated list of 360 species is arranged in accordance with the classification of the A. O. U. check list. The A. O. U. number is omitted and only the successive numbers of the birds found in Colorado are entered. Preceeding the list proper, the species are classified in the following manner: residents 87, regular winter visitants from the north 24, regular breeders that sometimes occur in winter 17, rare or accidental winter visitants 22, summer residents 228, summer visitants not known to breed 15, migrants 58, stragglers 48, regular visitants from east and south-east 14, rare visitants from east and south-east 33, regular visitants from west and south-west 20, rare visitants from west and south-west 12. It would have been preferable if the author had placed the 48 stragglers or doubtful species in a seperate list instead of placing them in the body of the work. As a whole, the work is a valuable contribution to the ornithological literature of Colorado. Mr. Cooke displayes rare skill and efficiency in its preparation.

PUBLICATIONS RECEIVED.

Beal, F. E. L., Some Common Birds, in their relation to agriculture. (Bull. No. 54, U. S. Dept. of Agriculture, 1897, pp. 1-40, 22 figs.)

Cooke, W. W., The Birds of Colorado, (Bull. Colorado Agr. Exper. station, No. 37, pp. 1-143, March, 1897.)

Bulletin, Michigan Ornithological Club, Vol. 1. No. 2, April, 1897.

"General Notes," Bull. Nos. 14-15, Wilson Orn. Chap. of A. A., May-July, 1897.

Le Naturaliste Canadien, Vol. 24, Nos. 5-7, May-July, 1897.

Museum, Vol. 3, Nos. 7-9, May- July, 1897.

Nidologist, Vol. 4, Nos. 8-10, April-June, 1897.

Oologist, Vol. 14, Nos. 4-6, April-June, 1897.

Oregon Naturalist, Vol. 4, Nos. 5-7, May-July, 1897.

Osprey, Vol. 1, Nos. 9-11, May-July, 1897.

Popular Science News, Vol. 31, Nos. 5-7, May-July, 1897.

Recreation, Vol. 6, No. 6, June, 1897.

Stories from Nature, Vol. 1, No. 1, June, 1897.

Eight new members (seven active and one associate) have been admitted to the I. O. A. since the list published in the January, 1897, IOWA ORNITHOLOGIST. To active membership, Hall H. Thomas, Decorah; George C. Hoover, West Branch; Henry Elridge, Decorah; E. D. Carter, Berkely; John S. Kinner, Fayette; Frank Robertson, Fayette; Harris I. Smullen, Clinton and Bert H. Wilson, Rock Island, Ill., to associate membership.

NOTES AND NEWS.

Mr. Paul C. Woods writes that Ducks and Geese have been swarming by the thousands on the lakes and rivers near Spencer, Iowa, this spring.

Do not forget the date of the congress, Aug. 11-12-13, 1897. Come prepared to give your new ideas on collecting and preparing ornithological material and to demonstrate the same if pactical. Come expecting to get new ideas.

On May 22nd, 1897, while at Ames, I collected a nest of the Woodthrush containing seven Cowbird eggs and three eggs of the Woodthrush. Incubation had just begun and all eggs were in the same stage. H. H. THOMAS.

Mr. Rudolph M. Anderson of Forest City writes that he secured a fine series of Traill's Flycatchers, June 25, 26 and 29th, fifteen nests with eggs being examined. On June 12th he found seven nests with eggs of the Long-billed Marsh Wren.

Mr. Earnest Irons of Council Bluffs found his time limited while in Chicago therefore the idea of preparing the article on the "Field Columbian Museum" was of necessity abandoned. He has hoped to substitute this article with a record of his studies and conclusions on "The Hybrid Yellow and Red-shafted Flicker," but has not completed the last mentioned article. It will probably appear in the next issue.

The Carolina Rail—Sora or Ortolan, as it is variously called—is a common summer resident in Boone county and breeds in suitable localities. May 23 I found one set of six and one set of fifteen eggs. The nests were placed in course dense grass growing close to the edge of the slough; in shape, similar to the Redwing's nest and placed about a foot above the water. The nest containing the fifteen eggs was a sight to behold, five or six eggs having piled on top of the others. In this locality the Sora Rail usually selects small but deep ponds for nesting sites. Have any of my friends found a larger set of eggs of the Ortolan?

CARL FRITZ HENNING.

EXCHANGE COLUMN.

Brief special announcements "Wants" "Exchanges," "For Sales," insected in this department free to all members of the I. O. A., and to all subscribers of the IOWA ORNITHOLOGIST. Dealers can use these columns at regular advertising rates only.

IOWA COLLECTORS—have on hand a limited number of lists of "Birds of Winnebago and Hancock Counties," which will be mailed, while they last, for 10¢ per copy. Rudolph M. Anderson, Forest City, Iowa.

TO ERCHANGE—I have sets with data of the following A. O. U. Nos. to exchange for other sets or for Indian relics: 59, 202, 219, 221, 263, 316, 333, 444, 488, 497, 498, 595, 612, 705, 724, 755. P. C. Woods, Spencer, Iowa.

FOR SALE or exchange—Two magazine cameras, $25.00 and $3.00; a navy pistol $12.00; an old fashioned revolver $9.00, both six shoot; also a turning lathe for wood $5.00. Would like to have Indian war bow and arrows for lathe. Hary A. Harman, 311 D. and L. St. Danville, Pa.

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The Iowa Ornithologist.

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CONTENTS.

One Small Piece of Ground, Burtis H. Wilson	47
Summer Birds of the Oneota Valley, Paul Bartsch	51
Death of Mrs. Gus Walters	62
Resolutions of Condolence	62
Notes and News	63
Book Review	64
Publications Received	64

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ONE SMALL PIECE OF GROUND.

BY BURTIS H. WILSON.

Paper read before the Third Congress of I. O. A.

THE number of birds that may be found in a small area is legion—provided the character of the ground is sufficiently varied. In the northern portion of the city of Davenport, Iowa, just outside the thickly settled district, is a piece of ground, about two acres in extent, belonging to a florist, who, for several years, has not taken the care of his grounds that he did when he was young and doing a flourishing business. The grounds are divided nearly in half by the greenhouses which extend from east to west. Let us look first at the southern half.

From the green houses the land slopes toward the south-east the extreme corner being cut off by a little creek. This little corner is filled with a grove of small maples. From the creek to the southwest corner, the fence is lined with bushes and small trees, as is also the fence on the west side. North of the greenhouses the land is different. The north end fence is overgrown with woodbine and raspberry vines; next to it stands a "wind-brake" of several rows of maples, very close together and very tall, running the whole width of the grounds. Then at short intervals south of these trees are rows of small trees of many varieties, overgrown with vines, blackberry bushes, rows of currant bushes and flowering shrubs. Only the extreme half of the northern part of the ground is thus covered, the part next the greenhouse being devoted to flowers.

Taken as a whole these grounds are a paradise for birds, such as the Thrushes, Jays, Warblers, Vireos, Flycatchers, and above all the *Fringillidæ*. In the migrating season, hosts of Sparrows of all kinds, White-throated, White-crowned, Chipping, Field, Tree, Song, Swamp, Fox and the English Sparrows, Chewinks, Goldfinches, Grosbeaks, Purple Finches, and many others abound here. Among the rarer visitors during the migrations, I have noted one Harris' and one Clay-colored, both being seen in the bushes at the north end. The "windbrake" of maples is the home of many Woodpeckers, especially the Yellow-bellied, during the migrations. At one end of the row stand two or three evergreen trees with their bark pitted all over by these birds. Around the evergreens is a mat of berry bushes which is always full of birds. Among these maples, one spring, I flushed a Whip-poor-will several times and as this bird is quite rare here, I considered it quite a find. Blackbirds and Orioles are

very abundant, the former especially so in the spring. Among the thickets the Screech Owl finds seclusion by day and a plentiful supply of birds and field-mice at night. Here also the Great Northern Shrike makes his winter home and is always sure of a Tree-Sparrow, or if he goes into the next field he may vary his diet with a Horned Lark for dinner. In the little grove of maples at the south-east corner I flushed a Woodcock several times one hot afternoon in August. Here, too, I have seen a Marsh Hawk, and in one of the plumb trees near the south fence a Green Heron once ventured to alight. Speaking of Herons reminds me that I once saw a Night Heron alight in the top of a large boxelder standing by the little creek and about a hundred yards south of the little grove of maples. And also that during the migration one spring a boy found an American Bittern sitting in a brush heap just back of a house not more than a hundred yards south-west of the place I have been describing. The Bittern allowed itself to be captured and placed in a cage where I saw it a few days later. I might also state that in the bushes and small trees across the road and not a hundred feet distant from the small grove where I flushed the Woodcock, I have shot a Winter Wren, Long-billed Marsh Wren, Yellow-bellied Flycatcher and Black-billed Cuckoo. Furthermore, one very hot Sunday afternoon in July a Great Horned Owl, pursued by a mob of Blue Jays, paused for a few minutes in the top of one of the large maples which stand close by the florist's house.

These grounds furnished a good field for the Oologist. Here is a list of the birds I have found nesting on the premises and it is probable that this does not represent more than one-half the varieties which nest within its boundaries: Robin, Catbird, Brown Thrasher, House Wren, Turtle Dove, Bronzed Grackle, Baltimore and Orchard Orioles, Cedar Bird, American Goldfinch, Rose-breasted Grosbeak, Field and Chipping Sparrows, Yellow-bellied Cuckoo, Black-capped Chickadee, Bell's and Warbling Vireos, Yellow Warbler and last, but not least common, the Cowbird. I have seen the Maryland Yellow-throat with a worm in its bill and very much excited by my presence but was unable to find the nest. I give here a few notes from my journal:

1. May 22, 1895, Chickadee's nest, three highly incubated eggs, three feet from the ground in a hole in a rotten stump.

2. June 7, 1896, Orchard Oriole's nest, three fresh eggs, also one egg of the Chipping Sparrow. Nest twenty feet up in a Lombardy poplar, lined with hair like a Chipping Sparrow's.

3. May 27, 1891. Field Sparrow, three eggs of the Sparrow and two of the Cowbird. Nest on the ground under wild parsnip.

4. June 16, 1891, Bell's Vireo, four eggs. Nest three feet from the ground in a currant bush.

5. August 19, 1892. Yellow-billed Cuckoo, two eggs. Nest ten feet up in a maple sappling covered with grape-vines.

In another small maple sappling, a friend of mine once found a Goldfinch's nest containing spotted eggs.

These are only a few of the many notes I made in these grounds. Surely

this was a paradise for the small birds. I say was for the florist has at last had the place cleaned up; trees, bushes and vines cut down or trimmed and, since the place has returned to civilization, no more shall I visit it, for with the removal of the wild growth the most of the birds have also gone.

DISCUSSIONS.

MR. J. H. BROWN says he has visited the place of which Mr. Wilson speaks and it was indeed "a paradise for birds." But at the present time the place has been cleaned up and divided up and sold and now new buildings are being erected on the grounds.

Mrs. Triem speaks of a beatiful sight which she has visited; a valley where there are an immence number of birds, especially during the migrating season. [Perhaps Mrs. Triem can, in the near future, give us an extended account of her experiences and finds in this valley. Ed.]

The fact that the White-crowned Sparrow is abundant near Davenport and quite rare at Burlington was mentioned by Mr. Brown, but he could give us no satisfactory solution of the question "why this was so?" He also thought that possibly the Chipping Sparrow's egg found by Mr. Wilson in an Orchard Oriole's nest, might have been a runt egg of the Oriole, as he has found a set of four of the Oriole's eggs which were no larger than Chipping Sparrow's eggs. And again, from the fact that the nest had a lining of hair, it may have been first built by the Sparrow which laid one egg before the Oriole chanced along and took possession; the Oriole refitting the nest and laying her eggs without molesting the Chipping Sparrow's egg.

Mrs. Mary L. Raun asks if the Cowbird and the Cuckoo are the only birds that lay in other birds' nests.

Mr. Brown states that the Cuckoos do not lay in the nests of other birds. Simply the two species of Cuckoos—the Yellow-billed and Black-billed—will occasionally drop their eggs in the other's nest. Of this occasional freak, Messrs. Law, Brown and Savage have made authentic observation.

Mrs. M. A. Triem remarks that she has seen the House Wren sitting on a set of English Sparrow's eggs, but she did not have the opportunity of revisiting the place and making further investigation. Therefore, it may have been that this little inquisitive Wren found the Sparrow's nest when the owner was absent and thought she would try her skill at incubating *Passer domesticus* eggs. [I dare say that the Wren disappeared quickly upon the Sparrow's return. I do not attribute enough reasoning faculty to these impetuous foreigners for them to become successful parasites. Ed.]

Mr. J. Eugene Law spoke of the explanation of the "large sets," such as seven and eight eggs of the Crow, fifteen and twenty eggs of the Bob-white, as being the result of two females laying in the same nest. Probably this circumstance is indulged in by a much larger number of species and more often than

is usually supposed. He also mentions the late nesting of the Cuckoos, especially the Yellow-billed. He has found its nest with fresh eggs in as late as August 20th. Mr. D. L. Savage brings the date to August 25th and Mr. Brown found in one tree, on September 4th, a Dove's nest containing two fresh eggs and just above it a nest of the Yellow-billed Cuckoo in which were three slightly incubated eggs. Mrs. Raun found two young Mourning Doves in a nest as late as September 14th.

The diet of the Shrike was quite thoroughly discussed. Mrs. Triem was not aware of their eating Prairie Horned Larks, but had seen them catch Tree Sparrows. It was a unanimous decision that the barbed wire fences was a great boon to these birds; frogs, mice, Tree Sparrows and grasshoppers had been seen suspended from barbs. Mr. Brown finds the Loggerhead at Davenport in equal abundance with the White- rumped Shrike. There is some question about his statement. He says this is an opening for systematic investigation, there is room for opinions on both sides. A number of our Wrens and Flycatchers should receive special attention also.

Mrs. Raun was very glad that Mr. Wilson brought such an interesting subject before us, and she is going to make a list of the birds she finds in the lawn near her home and give to us at the next congress. That will be some systematic work.

In speaking of investigation on birds near town, recalls to Mr. Law some of his early experiences. For a month or more a flock of Evening Grosbeaks fed daily within the corporations of Perry, Ia. Our ornithologist at that place was very desirous of obtaining a number of specimens, so he would arise before people were awake and shoot once or twice—not often enough to arouse any disturbance—but continuing this a few mornings, the desired number of specimens were obtained. Mr. Brown was not energetic enough to follow the above prescription, but he, with Mr. Paul Bartsch, devised a scheme which worked successfully in Iowa City. A flock of birds—Redpolls—were feeding on the weeds along one side of the college campus, Mr. Brown secured an air gun and carefully discharged it at convenient intervals, while his co-worker in an unconcerned manner followed behind picking up the birds. A satisfactory number of Redpolls were secured. Not unfrequently this means was resorted to when rare birds were in the neighborhood and always with success.

Mr. Brown, while speaking of the rarer birds mentions the Red Crossbill. He thinks that it is possible that this species may be found nesting in the state in some of the wilder sections. Mr. Law saw three females in May at Perry, Iowa, and he has observed them in September; he also has seen a specimen of Evening Grosbeak in June, in Dallas county, but it was undoubtedly a lost bird.

The question is asked, "How many species of Juncos do we have in the state?" There is no positive answer to the question, but a number volunteer to make thorough investigation and undoubtedly this question will be cleared up before another congress. Up to date there are no authentic records of but one species being found—the Slate-colored Junco.

SUMMER BIRDS OF THE ONEOTA VALLEY.

(JUNE, JULY, 1895.)

BY PAUL BARTSCH.

Paper read before the Third Congress of I. O. A.

NATURE as if to show mankind what the conditions in that great fertile region traversed by the glaciers in the ice age, scarred, planed and covered by a morainic deposit, would have been; left untouched a strip of land extending over south-eastern Minnesota, western Wisconsin and north-eastern Iowa—a region wild, romantic and beautiful, the dream of our landscape artist, the paradise of our naturalist.

This region within our bounds is traversed in the northern portion by the Oneota river and its tributaries—it is the avifauna of this tract that I wish to consider in the present paper.

As topographic environment is one of the prime factors in the distribution of many of our birds, it will not be amiss to briefly consider this feature of our chosen field.

The Oneota, though not as active as during glacial and preglacial time, is nevertheless working slowly and diligently to lower its channel throughout most of its course. The lessened amount of water causes the stream to meander through a wide flood plane bounded everywhere by high ridges and bold bluffs. One may get somewhat of an idea of the amount of work accomplished by the stream in course of time, if he considers that it has cut a gorge through the various formations from the Trenton down to about 300 feet below the summit of the St. Croix sandstone.

The little tributaries have been equally busy and even now seem to try hard to cut down through the opposing rocks to keep on the same level with the river. Not always able to accomplish this in a uniform manner, owing to differences of rock texture, many beautiful water falls and cataracts have been formed in their course. Not unfrequently the gorge cut by some small rivulet has intersected an underlying water vein* and the additional force has helped to grind and cut deeper the lower course of the stream and now a beautiful water fall tumbles noisily from the cliff.

Throughout the course steep hills bound the valley on both sides. Frequently perpendicular cliffs rise almost from the water's edge to a heighth of several hundred feet and where the Oneota lime stone comes to the surface, bold, bared, massive battlements crown the summit of the adjacent hills.

The valley is wide,—the floodplane constitutes the farming land of the region. The currant varies with the formation; at places it is slack, then again

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* I particularly have in mind Seevers spring, some two miles south-east of Decorah.

it races along rapidly over a series of shallows, almost cataracts, and it is such places that make the river rather difficult to navigate in anything but a portable canoe.

* If one ascends one of the eminences he will notice a succession of ridges scattered irregularly, and generally separated by some tributary of the Oneota river. All these elevations are of about the same height, most of them with rounded top and abruptly sloping sides—typical features of a country long subjected to the agents of water and mechanical erosion. Frequently, however, tall buttes with rounded tops and steep boulder† covered sides can be seen, sentinels in the centre of the valleys.

The north-eastern slopes of all these ridges and buttes are covered by a mixed forest composed chiefly of burr oak (*Quercus macro carpa, Michx.*) hichories (*Hicoria ovata. Mill.*) Britt. and glabra (*Mill. Britt.*) and not unfrequently we find white pine (*Pinus strobus L.*) balsam (*Abies balsamea Mill.*) and Juniper (*Juniperu virginiana L.*) striving vainly for supremacy with the deciduous forest.

On the slopes bounding the river in Winnesheik Co., and for a little way in Allamakee, the white trunks of the Paper Birds (*Betula papyrifera Marsh.*) vie with the glistening boulders for conspicuousness and it is indeed beautiful to see the contrast of the white in the dark deep green of its surrounding.

The valley still retains some of the old giant patriarchs of the forest as man's axe has spared many, not on account of sentiment or love for the beautiful, for that indeed stands little show when the almighty dollar is the other consideration, but rather of their distance from a convenient port or place where they might be turned into lumber, the younger timber being more desirable for fire wood.

Giant elms, bass-wood, maples, hickories and oaks form the bulk of the timber and occasionally a sycamore stretches its ghostly branches above the other vegetation.

It is in these sylvan dells, where underbrush is scanty, that the Cerulean Warbler informs us of his presence, and the soft gradually fading veery-veery-veery of the Wilson's Thrush is offset by the bell-like tones of our woodland minstrel the Wood-thrush. The plaintiff note of the Wood-pewee, the chip-churrr of the Tanager and the daintily lisped song of the Redstart mingled with strophes from the Red-eyed and Warbling Vireo and harsher notes of the Flicker and Redhead greet you on all sides. The querulous rise and fall of the Blue-winged Yellow Warbler's song and an occasional chant of the Oven Bird not to be forgotten.

The reedy marshes with their lily covered lakes are choice places for the Red-winged Blackbird, Woodcock, Swamp Sparrow, Long-billed Marsh Wren, Killdeer and Plover, as well as the ever present Song Sparrow, the saucy

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* View from bluff opposite "The Elephant," Sect. 32, Twp. 100, N. R. V. W., Allamakee county, Iowa.

† Boulders of disintigration not transportation.

Western Maryland Yellow-throat, together with a host of swiftly gliding Swallows, all bent upon the destruction of the luckless insect which may have stretched its wings for the first time in its first flight; emerging from the larval form and its watery home to an untimely death.

The notes given with the species in the following list were taken between June 11 and July 10, 1895, a time when most birds are stationary, i. e. the swaying back and forth of a few weeks previous to this date is practically at rest and most birds are intent upon domestic duties. It is therefore highly probable that most if not all of them breed within the area under discussion, though absolute proof is lacking in the majority of cases. I have noted in each case whether the bird was found in both Winnesheik and Allamakee counties or in only one of them:

(*1*)—*Larus philadelphia.* BONAPARTS GULL.

A small flock of these birds were seen skimming about the marshes near the mouth of the river. Allamakee Co.

(*2*)—*Lophodytes cucullatus.* HOODED MERGANSER.

Several of these birds were noted in the marshes near the Missippi river. Allamakee Co.

(*3*)—*Aix sponsa.* WOOD-DUCK.

Several Wood-ducks were noted in our course down the stream and several more were seen in the locality cited for the Hooded Merganser. Winnesheik and Allamakee counties.

(*4*)—*Botaurus lentiginosus.* AMERICAN BITTERN.

A large number of these birds were observed in the marshes at the junction of the Chicago and Milwaukee R.R. and the Oneota river. Several were shot, among them a specimen which had lost one leg immediately above the tarsus. The birds undoubtedly breed here. Allamakee Co.

(*5*)—*Ardea herodias.* GREAT BLUE HERON.

Seen in the marshes near New Albin. Allamakee Co.

(*6*)—*Ardea virescens.* GREEN HERON.

Not a very common bird, but several were observed along the river—more plentiful as we approached the Mississippi. Winnesheik and Allamakee Co's.

(*7*)—*Philohela minor.* WOODCOCK.

This bird breeds at Decorah where I obtained several young. They were also met with in many other places farther down the stream and seemed to be fairly abundant,—perhaps there is little persecution from the sportsman which would account for their comparative abundance. Winnesheik and Allamakee counties.

(*8*)—*Actitis macularia.* SPOTTED SANDPIPER.

Very abundant throughout the range—young as well as old birds were seen

everywhere. Winnesheik and Allamakee counties.

(9)—*Ægialitis vocifera.* KILLDEER.

This bird was noted in the marshes at Decorah and near New Albin and also in several places between these points. On one occasion at quite a distance from the water. Winnesheik and Allamakee counties.

(10)—*Colinus virginianus.* BOB WHITE.

The Pleasing call of this species greeted us from many a meadow and field in our journey down the steam. Winnesheik and Allamakee counties.

(11)—*Bonasa umbellus.* RUFFED GROUSE.

Very numerous throughout the valley. Many broods were flushed and young in various stages, from a few days old to half grown, were obtained. They seemed to prefer the brushy slopes but were also quite abundant in the timber of the valley. Winneshiek and Allamakee counties.

(12)—*Meleagris gallopavo.* WILD TURKEY.

A few stray feathers from wing and tail of this species were found in the more remote portions of the valley which would indicate their presence, though no birds were actually seen. Allamakee county.

(13)—*Zenaidura macroura.* MOURNING DOVE.

Noted on the sand flats along the river where they seem to come for sand baths. Winnesheik and Allamakee counties.

(14)—*Cathartes aura.* TURKEY VULTURE.

Quite common along the valley, especially where the Oneota lime stone forms the cap, in the crevices of which I suppose they find suitable breeding places. Winnesheik and Allamakee counties.

(15)—*Accipiter velox.* SHARP-SHINNED HAWL.

Common; breeds in the crevices in the cliffs. The young are very noisy and usually betray the nesting site by their notes. I examined one of these abodes several hundred feet above the river in the cliff adjacent to the Chicago and Milwaukee R. R. near its junction with the Oneota, a little south-west of New Albin (Iowa Bluff), and found numerous wings of the smaller birds, such as Warblers, Black Birds, Meadow Larks, Song Sparrows, Flickers, Robins, etc., etc., as well as some bones belonging to small rodents, Spermophiles perhaps, scattered about the crevice. The young were large enough to vacate the residence when I made my appearance (July 5, 1895) and I had to be contented to gaze upon the amount of mischeif wrought by a family of these falcons. The Sharp-shinn surely has few redeeming features, when we consider the amount of havoc he causes among our small birds.

These birds were noticed to extend about forty miles up the valley and appeared to inhabit many of the exposures along the Mississippi valley as far south as Eagle Point Dubuque, where the last family was noted. Single birds were seen near Decorah, but no nesting site in cliffs was observed until we had

passed the boundary between the two counties. Winnesheik and Allamakee counties.

(*16*)—*Accipiter cooperi.* COOPER'S HAWK.

Apparently not so abundant as the foregoing, and confined more to the timber area. Three young and an addled egg were taken from a nest at Decorah. Winnesheik and Allamakee counties.

(*17*)—*Butes borealis.* RED-TAILED HAWK.

Quite common throughout the valley. Not a day passed but what a number of these birds were noticed. Several young and adults were shot from the boat. Winnesheik and Allamakee counties.

(*18*)—*Buteo lineatus.* RED-SHOULDERED HAWK.

By no means as common as the last. Allamakee county.

(*19*)—*Buteo latissimus.* BROAD-WINGED HAWK.

Several of these birds were seen but none secured. Winnesheik and Allamakee counties.

(*20*)—*Haliactus leucocephalus.* BALD EAGLE.

A bird, which I took to be of this species, was seen flying about a cliff on June 28th, in Allamakee county.

(*21*)—*Falco peregrinus anatum.* DUCH HAWK.

A pair of birds which I am inclined to refer to this species were noticed sporting about one of the steep escanpments. The graceful swift movements and size cause me to believe that it must have been this master, as he is the only one able to perform such feats of wing. Allamakee county.

(*22*)—*Falco spavarius.* SPARROW HAWK.

Not common in the valley proper; only a few observed and these frequented the more exposed situations. Winnesheik and Allamakee counties.

(*23*)—*Bubo virginianus.* GREAT HORNED OWL.

Quite common; a young bird whose head was still covered with down was shot. The birds keep close to the water and on several occasions I flushed them in early morning from fallen trees which extended into the water. The fact that this happened repeatedly led me to believe that Bubo might at times vary his diet by catching a fish. Is it not possible that the fish might be attracted by his glowing eyes? Winnesheik and Allamakee counties.

(*24*)—*Syrnium nebulosum.* BARRED OWL.

Seems to be more restricted to the hills and hill-sides. Winnesheik and Allamakee counties.

(*25*)—*Megascops asio.* SCREECH OWL.

The querulous wailing note of this bird was heard many an evening in our

course down stream. Winnesheik and Allamakee counties.

(*26*)—*Coccyzus americanus.* YELLOW-BILLED CUCKOO.

Quite common but shy. Winnesheik and Allamakee counties.

(*27*)—*Ceryle alcyon.* KINGFISHER.

Not very common but generally distributed throughout the valley. Winnesheik and Allamakee counties.

(*28*)—*Dryobates villosus.* HAIRY WOODPECKER.

Quite common throughout the valley; young and adults were obtained in Winnesheik and Allamakee counties.

(*29*)—*Dryobates pubescens medianus.* DOWNY WOODPECKER.

Very common everywhere. Winnesheik and Allamakee counties.

(*30*)—*Sphyrapicus varius.* YELLOW-BELLIED WOODPECKER.

Several families, old and young, of this bird were met with in the timber bordering the river. They seem to be partial to such locations as not a single bird was observed in any other place. Winnesheik and Allamakee counties.

(*31*)—*Melanerpes erythrocephalus.* RED-HEADED WOODPECKER.

A common bird in Winnesheik and Alamakee counties.

(*32*)—*Melanerpes carolinus.* RED-BELLIED WOODPECKER.

Not common and apparently restricted to the heavy timber. Winnesheik and Allamakee counties.

(*33*)—*Colaptes auratus.* FLICKER.

Common everywhere. Winnesheik and Allamakee counties.

(*34*)—*Antrostomus vociferus.* WHIP-POOR-WILL.

Judging from their notes, I should say that they were not very abundant. But this I believe is their silent season so the mere fact that they were heard will have to suffice for this record. Winnesheik and Allamakee counties.

(*35*)—*Chordeiles virginianus.* NIGHT HAWK.

Quite common in both Winnesheik and Allamakee counties.

(*36*)—*Chaetura pelagica.* CHIMNEY SWIFT.

Common everywhere and I believe careful search would reveal some primitive nesting sights in trees. Winnesheik and Allamakee counties.

(*37*)—*Trochilus colubris.* RUBY-THROATED HUMMING BIRD.

Very common in both Winnesheik and Allamakee counties.

(*38*)—*Tyrannus tyrannus.* KING BIRD.

Common in both Winnesheik and Allamakee counties. Nests were found at Decorah.

(*39*)—*Myiarchus crinitus.* CRESTED FLYCATCHER.

This bird frequents the wooded valleys where its noisy call betrays its presence oftener than the sight of the bird itself. Winnesheik and Allamakee Co's.

(*40*)—*Sayornis phœbe.* PHŒBE.

Very abundant; nests were found under bridges and one in an old stump. Winnesheik and Allamakee counties.

(*41*)—*Cantopus virens.* ACADIAN FLYCATCHER.

Quite abundant along the water courses. Winnesheik and Allamakee Co's.

(*42*)—*Empidonax virescens.* WOOD PEWEE.

One of the most abundant summer residents. Its pretty nests were found in many places in both Winnesheik and Allamakee counties.

(*43*)—*Empidonax minimus.* LEAST FLYCATCHER.

These birds breed abundantly about Decorah where a number of nests were examined, some containg fresh eggs, some young. The nest is a beautiful structure built in the fork of some branch, usually only a few (6 to 15) feet from the ground. Winnesheik and Allamakee counties.

(*44*)—*Octoris alpestris praticola.* PRAIRIE HORNED LARK.

A few of these birds were observed in both Winnesheik and Allamakee counties. Usually their note, when on wing, notified us of their presence.

(*45*)—*Cyanocitta cristata.* BLUE JAY,

This noisy marauder was always present. Winnesheik and Allamakee Co's.

(*46*)—*Corvus americanus.* AMERICAN CROW.

Very common in both Winnesheik and Allamakee counties.

(*47*)—*Dolichonyx oryzivorus.* BOBOLINK.

Common in the rank meadows where the male pours forth his bubbling song, from reed or whilst he flutters in the air. Nests were found at Decorah. Winnesheik and Allamakee counties.

(*48*)—*Molothrus ater.* COW-BIRD.

Common in both Winnesheik and Alamakee counties.

(*49*)—*Agelaius phoeniceus.* RED-WINGED BLACK-BIRD.

Very abundant about the marshes, where a number of nests were found. None were placed more than four feet from the ground. Winnesheik and Allamakee counties.

(*50*)—*Sturnellu magna.* MEADOW LARK.

Quite common in the fields of the valley. Winnesheik and Allamakee Co's.

(*51*)—*Iterus spurius.* ORCHARD ORIOLE.

Abundant; nests throughout the valley. Winnesheik and Allamakee Co's.

(*52*)—*Quiscalus quiscula aeneus.* BRONZED GRACKLE.

Common in both Winnesheik and Allamakee counties.

(*53*)—*Icterus galbula.* BALTIMORE ORIOLE.

By far not as common as the last. Winnesheik and Allamakee counties.

(*54*)—*Spinus tristis.* GOLD FINCH.

Very abundant and feeding, apparently, upon seeds of the thistle (*Cnicus lanceolutus*), only at this time. Winnesheik and Allamakee counties.

(*55*)—*Poocaetes gramineus.* VESPER SPARROW.

Next to the Song Sparrow, the most abundant summer resident. Breeds abundantly almost everywhere throughout the valley. The birds were in full song and would mount some stake or alight in a tree to deliver their pleasing notes. Winnesheik and Allamakee counties.

(*56*)—*Ammodramus savannarum passerinus.* GRASSHOPPER SPARROW.

The whirring note of this bird soon announced his presence and caused the death of several of them. Winnesheik and Allamakee counties.

(*57*)—*Chondestes grammaeus.* LARK SPARROW.

Several of these birds were noticed on a bare hillside near a small stream. Allamakee county.

(*58*)—*Spizella socialis.* CHIPPING SPARROW.

Common, especially so about dwellings. Winnesheik and Allamakee Co's.

(*59*)—*Spizella pusilla.* FIELD SPARROW.

Common everywhere in Winnesheik and Allamakee counties.

(*60*)—*Melospiza fasciata.* SONG SPARROW.

By far the most abundant species throughout the valley. The song, though somewhat sleepy and not so varied as at an earlier period, was nevertheless very pleasant and it seems to me that not ten rods of ground were passed without hearing one or more of these birds.

(*61*)—*Melospiza georgiana.* SWAMP SPARROW.

Not very abundant; a number were seen in the marshes. They were shy and secretive. Winnesheik and Allamakee counties.

(*62*)—*Pipilo erythropthalmus.* TOWHEE.

Very common on all brush covered hill sides. Nests were found in both Winnesheik and Allamakee counties.

(*63*)—*Zamelodia ludoviciana.* ROSE-BREASTED GROSBEAK.

Breeds commonly in both Winnesheik and Allamakee counties.

(*64*)—*Passerina cyanea.* INDIGO.

Quite common in both Winnesheik and Allamakee counties.

(*65*)—*Spiza americana.* DICKCISSEL.

Common in Winnesheik and Allamakee counties.

(*66*)—*Piranga erythromelas.*

Breeds abundantly in both Winnesheik and Allamakee counties. All the nests were placed in oak trees way out on the branches at varying heights.

(*67*)—*Progne subis.* PURPLE MARTIN.

Noticed about Decorah and New Albin and also about several of the farms between these two localities. Winnesheik and Allamakee counties.

(*68*)—*Petrochelidon lunifrons.* EAVE SWALLOW.

Common; several colonies were seen established on cliffs in Winnesheik and Allamakee counties.

(*69*)—*Chelidon erythrogaster.* BARN SWALLOW.

This graceful bird was met with everywhere. On one occasion a nest was found attached to one of the beams on the under side of a bridge. Winnesheik and Allamakee counties.

(*70*)—*Tachycineta bicolor.* WHITE-BELLIED SWALLOW.

Quite abundant along the river, more so in the marshy tracts. Winnesheik and Allamakee counties.

(*71*)—*Clivicola riparia.* BANK SWALLOW.

Nests commonly throughout the range. Winnesheik and Allamakee Co's.

(*72*)—*Stelgidopterix serripennis.* ROUGH-WINGED SWALLOW.

The rarest of the Swallows. Winnesheik and Allamakee counties.

(*73*)—*Ampelis cedrorum.* WAXWING.

Quite common along the valley. Winnesheik and Allamakee counties.

(*74*)—*Lanius ludovicianus excubitoroides.* WHITE-RUMPED SHRIKE.

Not very common; frequents the more exposed situations.

(*75*)—*Vireo olivaceous.* RED-EYED VIREO.

This bird is very common in the Oneota valley and quite a number of nests were found. Winnesheik and Allamakee counties.

(*76*)—*Vireo gilvus.* WARBLING VIREO.

Not as common as the last. Winnesheik and Allamakee counties.

(*77*)—*Vireo flavifrons.* YELLOW-THROATED VIREO.

This species is rarer than the preceeding two. Nests at Decorah. Winne-

sheik and Allamakee counties.

(78)—*Mniotilta varia.* BLACK AND WHITE CREEPING WARBLER.

Common in the wooded portions. Young and adults were obtained. Winnesheik and Allamakee counties.

(79)—*Helminthophila pinus.* BLUE-WINGED WARBLER.

Not common; frequents the moist wooded portions. Winnesheik and Allamakee counties.

(80)—*Helminthophila chrysoptera.* GOLDEN-WINGED WARBLER.

Rare. Only a single specimen observed in a ravine about a mile or so south of Fairport. This was a male in full song. I waited and watched him carefully for some time hoping to be able to detect a nest, but in this I was dissapointed. Winnesheik county.

(81)—*Dendroica aestiva.* YELLOW WARBLER.

Breeds commonly in the willows along the the river. Winnesheik and Allamakee counties.

(82)—*Dendroica rara.* CERULEAN WARBLER.

Abundant in the heavy timber along the water courses. Winnesheik and Allamakee counties.

(83)—*Seiurus auricapillus.* GOLDEN CROWNED THRUSH.

Common; breed abundantly on the wooded hill sides. Winnesheik and Allamakee counties.

(84)—*Seiurus moticilla.* LOUISIANA WATER-THRUSH.

Common; young and old were obtained. It is a pretty sight to see the parents lead the young at the water edge, encouraging them to enter and wade and calling them in when the current has proved too strong and has carried the fluttering chap down a little ways. Winnesheik and Allamakee counties.

(85)—*Geothlypis trichas accidentalis.* WERTERN MARYLAND YELLOW-THROAT.

The most abundant of the Warblers. His lively which-e-ta, which-e-ta, which-e-ta, wit, was heard everywhere from the reedy marsh, as well as the bushy hill, and even the timber seems to furnish him a home in this region. Winnesheik and Allamakee counties.

(86)—*Icteria virens.* YELLOW-BREASTED CHAT.

This master singer is quite rare in the Oneota valley, only a few were noted. Winnesheik and Allamakee counties.

(87)—*Setophaga ruticilla.* RED START.

Breeds abundantly in both counties. Nests were found some 30 feet from the ground. Winnesheik and Allamakee counties.

(*88*)—*Galeoscoptis carolinensis.* CAT BIRD.

Breeds very abundantly throughout the valley. Winnesheik and Allamakee counties.

(*89*)—*Harpoehynchus rufus.* BROWN THRASHER.

A common breeder in both Winnesheik and Allamakee counties.

(*90*)—*Troglodytes aedon.* HOUSE WREN.

Quite abundant at Decorah, also noted many times on our trip down stream.

(*91*)—*Cistothorus palustris.* LONG-BILLED MARSH WREN.

Quite common in the marshes about New Albin, also noted in several places along the river. Winnesheik and Allamakee counties.

(*92*)—*Sitta carolinensis.* NUTHATCH.

This busy bird of the forest was found quite abundant in both Winnesheik and Allamakee counties.

(*93*)—*Parus atricapillus.* CHICADEE.

Very abundant throughout the range. Winnesheik and Allamakee Co's.

(*94*)—*Turdus mustelinus.* WOOD THRUSH.

Common in both Winnesheik and Allamakee counties. Young and adults were obtained in both places.

(*95*)—*Turdus fuscescens.* WILSON'S THRUSH.

Breeds along Canoe river near the junction with the Oneota, where young and adults were obtained. Also noted at other places. Winnesheik and Allamakee counties.

(*96*)—*Merula migratoria.* ROBIN.

Common throughout the valley but partial to the cultivated portions. Winnesheik and Allamakee counties.

(*97*)—*Sialia sialia.* BLUE BIRD.

Blue Birds were exceedingly scarce owing to the cold winters of 1894-'95 which threatened to exterminate the race. Only one pair was noted about two and one-half miles south of Decorah, where they had established themselves in a tree and were left unmolested with our best wishes for a successful year at house keeping. Winnesheik county.

(*98*)—*Passer domesticus.* ENGLISH SPARROW.

Though the last in our list he was by no means the least abundant. He seems to have spread pretty well over the entire area of the Oneota valley, as most farms were provided with a band of these birds. Only the smaller out of the way houses seemed to have been neglected, but judging from the small flocks which were occasionally noted—evidently exploring expeditions—it will not take long until even these will have received their quota of these birds.

DISCUSSIONS.

MR. BROWN thinks it is not always safe to judge the abundance of the Wild Turkey by the tail feathers found in the woods. Nor does it unmistakably indicate the presence of this species to find Turkey feathers, even in remote regions, as many such feathers never had more than a tame Turkey attached to them.

Mr. Law inquires if the other members have found the Louisiana Water-Thrush to be the prevailing form in their localities. In Dallas county, he thought the Water-thrush (*Seiurus moticilla*) to be the most abundant, the other species only a rare visitor. There seems to be some diversity of opinion as to which is the most plentiful in the state, both species having been noted as nesting. These were iucluded in the list of birds of which the Association should make special study the ensuing year.

The fact of the Sharp-shinned Hawk nesting in such abundance in the two counties—Winnesheik and Allamakee—is surprising and brings forth a number of remarks. Mr. Brown suggests that if more thorough search were made it would probably be found nesting in other portions of the state. Mr. Savage can only see one explanation of their scarcity in Henry county, and that is the abundance of the Cooper's Hawk. Mr. Bartsch has the abundance of the Sharp-shinned succeeded by a scarcity of Cooper's, and "'tis a poor rule that won't work both ways."

DEATH OF MRS. WALTERS.

THE Angel of Death has entered our midst and taken one of our number. It is with sadness that we announce the death of Mrs. Gus Walters, an active member of the Iowa Ornithological Association. She died at her home at Cedar Falls, Iowa, on July 31st, 1897. Mrs. Walters was an ardent lover of birds and her skillful fingers often helped her husband while at his taxidermical work.

We believe she looked "Though Nature up to Nature's God." She regarded this beautiful world as one of the numberless chambers in a Heavenly Father's masion, from which death was but a door opening into larger and brighter rooms beyond. She has but gone on before.

RESOLUTOINS.

In view of the loss we have sustained by the decease of our friend and associate, Mrs. Gus Walters, and the still heaver loss sustained by those who

were nearest and dearest to her.

THEREFORE—be it resolved that it is but a just tribute to the memory of the departed to say that in regretting her removal from our midst, we but speak the sentiments of her friends and the Iowa Ornithological Association.

RESOLVED—that we sincerely condole with the family of the deceased and commend them for consolation to Him who orders all things for the best.

RESOLVED—that this testimonial of our sympathy be forwarded to the friends of the departed through the columns of the IOWA ORNITHOLOGIST.

J. EUGENE LAW,
MRS. M. A. TRIEM,
MRS. M. L. RAUN.

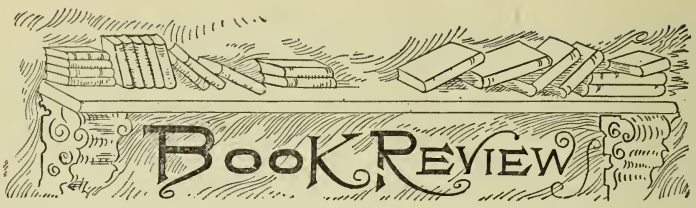
NOTES AND NEWS.

Mr. Hiram Heaton of Glendale, Ia., made a pleasant call at the editorial den recently. The editor is always glad to entertain any of the ornithological brethren.

On September 3rd, 1897, Mr. J. H. Brown, J. Eugene Law, Chas. R. Keyes and David L. Savage took supper at the hospitable home of George H. Burge, of Mt. Vernon, Iowa. There is no need to say the hour was one of pleasure and profit. Mr. Burge has quite an extensive collection of bird's eggs and mounted birds.

We are sorry to learn that the Nidologist, of Alameda, Cal., has been discontinued. The May issue is the last published. The main features, however, will be regularly continued by the same writers as a department of the Popular Science News.

Mr. Ernest Irons of Council Bluffs writes that the Least Bittern is a common breeder in Pottawattamie county, building its platform of sticks and straws in the cat-tails and rushes along the margin of swampy lakes. The nests are generally placed a few inches above the water, although I have found some nests with eggs on dry ground near the margin of a lake. The eggs vary in number from three to seven. The usual number is four or five, When first hatched, the young are golden yellow and are covered with soft fluffy down, being, to my mind, prettier during the first three or four days of their existance than they ever are afterward, with the exception possibly of the rich coloring of the adult male.



New books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor, who will examine them personally and give them due consideration.

"Citizen Bird"—Scences from bird life in plain english for beginners, by Mable Osgood Wright and Elliott Coues, with one hundred and fifteen illustration by Louis Agassiz Fuertes. New York, The Macuillian company, 1897. Cloth, $1.50. "Citizen Bird" will do more toward protecting our feathered friends than any work that has yet appeared. It has no equal. Every home should contain a copy.

Grinnell's "Report on the Birds of the Islands of Santa Barbara, San Nicolas and San Clements." A twenty-six page phamphlet, which is a report of the birds recorded during about a month's exploration among the islands last spring (1897). The sixty species treated, are arranged in four seperate lists—the land birds observed in each of the islands and the water birds recorded during the entire trip. It is replete with interesting field notes.

PUBLICATIONS RECEIVED.

Birds, Vol. 2, No. 3, September, 1897.

Fern Bulletin, Vol. 5, No. 3, July, 1897.

Le Naturaliste Canadien, Vol. 24, Nos. 8-10, Aug.-Oct., 1897.

Museum, Vol. 3, No. 10-12, Aug.-Oct., 1297.

Oologist, Vol. 14, Nos. 7-10, July-Oct., 1987.

Osprey, Vol. 1, No. 12, Vol. 2, No. 1, Aug.-Sept., 1897.

Popular Science News, Vol. 31, Nos. 8-10, Aug.-Oct., 1897.

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FOR THE

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Volume III.

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1897.

INDEX TO VOLUME III.

A Complete and Annotated List of Iowa Birds, Committee, Page 25
Affinities of the Mniotiltidæ, The, Morton E. Peck, 34
An Accidental Visitor, J. H. Brown, 11
Bird Migration in Iowa, Committee on Compilation, 12
Bob White, Wilmon Newell, 10
Book Review, 14, 29, 45, 64
Death of Mrs. Gus Walters, 62
Effect of the Season on Migration, H. J. Giddings, 41
Iowan Raptors, The, Charles R. Keyes, 1, 17
Manchester, 1897, 44
Members of the I. O. A. January, 1897, 15
New Year's Work, The, J. H. Brown, 12
Nesting Habits of Krider's Hawk, R. M. Anderson, 31
New Members I. O. A. 46
Notes and News, 24, 63
Notes on the Warblers of Jackson County, H. J. Giddings, 7
Notes from Forest City Iowa, R. M. Anderson, 30
Observations on the Cowbird, David L. Savage, 4
One Small Piece of Ground, Burtis H. Wilson, 47
Pied-billed Grebe, The, Carl Fritz Henning, 40
Prairie Hen, The, Wilmon Newell, 43
Publications Received, 14, 29, 46, 64
Resolutions of Condolence, 62
Summer Birds of the Oneota Valley, Paul Bartsch, 51
Wrens of Burlington, Iowa, The, Paul Bartsch, 21

EXCHANGE COLUMN.

TO EXCHANGE—An X. L. 44 cal. collecting shotgun, an Eastman Pocket Kodak and a Gem Pow camera 3¼x4¼. Want a 25 cal. Winchester rifle, fine Iowa sets, or books on ornithology. Write at once. Wilmon Newell, Ames, Iowa.

WANTED—a copy of Jordan's Manual of the Vertebrate Animals of the Northern United States, in good condition, for Steel's Popular Zoology and Woods' Natural History, both new, balance cash. H. M. McLaughlin, 117 w. 11th St., Mason City, Iowa.

FOR SALE or exchange—A fine collection of U. S. and Foreign stamps mounted in a Standard stamp album, also 30 Onion skin approval sheets. Wanted eggs with data in exchange. John J. Skinner, Fayette, Iowa.

WANTED—Swords and firearms, old and new. Can offer egg cabinet, eggs, books, papers and cash. Revolutionary relics also, Make offer for Gt. Blue Heron. A male live Red Fox for sale cheap. A. M. Farmer, 429 High St., Clinton, Mass.

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A beautiful photograph of an Osprey's nest on an island in the Pacific Ocean. Frank M. Chapman, the well known naturalist of New York city, writes the Heron Plume fashion. (He writes on Cuba, with photos taken on the island, in an early number.

Large picture of Snowy Heron, also another pertaining to Mr. Chapman's article. A photograph of a Californuia Ornithologist climbing a giant pine, besides numerous notes from all parts of the country, news items, etc.

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Contents.

The Psychic Nature of Bird Song, Morton E. Peck, - - 1
The Psychic Nature of Bird Song, Mrs. Mary L. Rann, - - 4
The Third Annual Congress of the Iowa Ornithological Ass'n 6
Economic Study, - - - - - - - 10
A Call to Duty, - - - - - - - 10
Bird Migration in Iowa—Instructions to Collaborators, - - 11
Notes and News, - - - - - - - - 14
Book Review, - - - - - - - - 15

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1897–1898.

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"Mid Haunts of Coot and Tern."

The Psychic Nature of Bird Song.

BY MORTON E. PECK.

Paper read before the Third Congress of the I. O. A.

OF all the errors regarding the habits and natures of birds, none is more prevalent than the total misconception of the real character of their songs and the articulate sounds which they produce. The mistake is easily accounted for. A degree of similarity existing between their notes and the human voice and some musical instrument, when producing sounds expressive of certain mental states, has lead men in all times, following an aesthetic rather than scientific impulse, to fancy them indicative of the same feelings as those which inspire spontaneous human song. A glance at the position occupied by birds in the vertebrate series and the examination of a few facts regarding their vocal expression will be sufficient to show how improbable it is that these are the outcome of any very complex psychic phenomena.

The natural position of birds is between the Reptilia and Mammalia. In the circulatory and respiratory system, including bodily temperature, they are much nearer the mammals; but on the other hand their organs of reproduction closely resemble those of the reptiles, and what is still more important in the present instance they have the lissencephalous reptilian brain. It is clear therefore that their mental faculties must be far below those of the quadrupeds, and will not pass far beyond the line of protective and reproductive instincts.

The songs and cries of birds are very generally supposed to indicate grief, joy, love, hate, anger, triumph, regret, and many other feelings of a more or less complex character. It is during the mating season that their vocal powers are exercised to their fullest, and hence the songs, notably of passrine birds, are supposed to express sentiments of joy and affection. Several facts may be cited which will show the improbability of such a theory. In the first place why should not the song continue till after the young are hatched, at which period paternal pride and affection would naturally be the strongest, instead of gradually ceasing as incubation advances? Again, if a nest is broken up and replaced by another, there is another reason of song, though no new mating, nor have we reason to think there is any special revival of joy or affection. And further, many song birds, some of which utter a great variety of cries will sing under the stress of any very strong excitement. I have observed a Batbird that had accidentally made its way into a room full of people singing with the accompaniment of a piano, after vainly seeking a way of escape, break into song, and continue singing for some time in a perfectly normal tone

and key. Many of the Vireos. conspicuously the White-eyed, "sing" their regular song as an alarm-cry when the nest is approached. Of course all those birds that have but a single cry may utter this on occasion of excitement of any kind. It does not seem likely therefore that the songs of birds during the mating season indicate any such purely psychical phenomenon as affection or joy, that is, of a rational or mental character. In fact, the excitement that calls forth the song at this time is in a large measure physical. During the mating period the bird is physically more active than at any other season of the year. This activity is manifested in various ways—by superior energy of movement, great pugnacity, perfection of coloration, and chiefly by sexual excitement; on their last in fact, the other manifestations of activity are more or less dependent, and it is to this also that the song is due. The reproductive instincts are now predominant and their natural expression is largely through the vocal organs. No doubt the song of the male bird is attractive to the female in proportion to its perfection; not however from any aesthetic sense on her part, but only as it indicates physical vigor. It is one of the finer properties of her reproductive instinct to choose the most vigorous male as the parent of her offspring.

Furthermore, this theory, that the song in the mating season is merely the expression of sexual activity readily accounts for the fact that a second period of song precedes the deposition of a second set of eggs, whether the species normally rears two broods in a season, or the first set of eggs is destroyed and is replaced by a second. In either case sexual excitement is renewed, though, as we would naturally expect, to a less degree than at first, and the song is proportionately feebler and its period of continuation shorter.

It is well known that many species of birds will remain inactive for a longer or shorter period after a nest has been broken up, uttering peculiar and often plaintive cries, which are usually supposed to be expressions of grief or regret over the loss. It is noticable however that these cries are usually the same as those emitted when an individual has become bewildered or lost during the migrating season, or is accidentally separated from the flock if the species is gregarious. The cause in both cases is doubtless much the same, and, though psychic in its nature is of a low and simple psychic order. It is merely that an instinct has been interrupted in its operation, the bird is at a loss what course to follow, and a species of mental excitement ensues which must find some vocal expression and which continues till the normal order of things is resumed. In the one case it is the migratory or gregarious instinct that has been interrupted, in the other the reproductive.

The sharp cries uttered by small birds on perceiving an individual of some perdatory species do not indicate any such complex psychic phe-

nomenon as hatred; they are either manifestatious of fear, a much simpler form of mental activity, or are alarm-cries, uttered for the purpose of calling others to the rescue; that is, they are dependent on a rudimentary reasoning faculty, which is but a slight advance on instinct and grows out of it. That a fixed animosity does not exist in birds is plainly shown by the fact that species hostile to small birds during the breeding season only, such as Crows and Jays, dwell with them in comparative peace during the rest of the year, however great the aversion manifested while the eggs and young are in the nest. Raptorial birds are of course always regarded as natural enemies, but, judging from the analogy of the former case, it seems probable that they are only held in fear which has grown instinctive.

From the facts above given, and from many others of a like nature that might easily pe presented, it seems hardly reasonable to suppose that the songs of birds have any more psychical significance than many other phenomena which they manifest. As before indicated it is easy to imagine that the endless variety of notes which they produce might be, judged by a human standard, expressive of an indefinite number of moods of mind. It seems, however, to be a general law among vertebrates, excluding man, that the vocal powers are developed, not according to the position occupied in the whole series, but according to the mean degree of physical activity attained. Though there are exceptions to this, they are not sufficiently numerous to destroy its force as a law. Birds are by far the most active of all vertebrates. Metabolism and catabolism reach in them their climax, the bodily temperature is higher than in any other class; the vital functions are performed with greater rapidity, and hence the vocal powers reach a higher stage of development. The same law holds within the class as in the whole vertebrate division. For example, the Vultures and Herons, which are comparatively sluggish, have very limited voice powers or none, while the Sparrow and Finch family, which are among the most active of birds, are unsurpassed in the gift of song.

The subject will doubtless admit of infinite research, and presents opportunities for many interesting discoveries. I have here presented, but in a very brief and general way what seems to me the most natural, and in fact the only reasonable theory regarding it.

The Psythic Nature of Bird Song.

BY MRS. MARY L. RANN.

Paper read before the Third Congress of the I. O. A.

IT is a question if Mr Peck takes himself seriously in "The Psychic nature of bird song," or expects others to, as his closing paragrapn contains the following: "The subject will doubtless admit of infinite" research and present opportunities for many interesting discoveries, I therefore beg leave to present a few thoughts on the other side. We must first admit that from the elusiveness of the subjects, that no standpoint, either scientific or not scientific, is likely to settle the varying opinions entertained. Mr. Peck feels his way carefully, though taking a scientific standpoint, admitting thereby that science has its limitations. It is quite probable that the unfortunate classification of birds may have swaged his mind, for who could endorse a bird with soul qualities under the reptilian stigma? We are told by Leonherd Stijneger that the classification of birds between the reptiles and the mammals, does not indicate any intermediate position in nature, but is simply due to our inability of expressing their exact position on a flat sheet of paper, but from this classified position they are far removed from the ancestral stock. Now common sense would say we had better give them the exact position due them as far and away removed from either reptiles and mammals. When we see birds bribe a snake by punching out its eyes and stand guard till it is dead, we are convinced there is an enmity between their ancestry and their present position in evidence for our instruction at least. We think of birds and their endowments as the most wonderful in animal life. The dullest clod is not insensible to their songs. It strikes the soul of the listener with psychic force, as coming from and to that invisable realm which is the actual and real within us. There is rythmic humming akin to human song. Why does a bird not express joy, gladness and even extacy of soul emotions, as in man? Luckily for us who believe that it does, cold science cannot prove that it is no more than automatic overflow from some psychical excitement. We say a bird expresses joy when lt sings because it sings, and it is my observation that few birds sing under an apparently excited condition. We might say as much perhaps of the Wren, but of ordinary birds we often see extreme deliberation. The meadow lark rises to a fence post, presses his feathers and when the spirit moves, sings. So with the Brown Thrush, and one's patience is sometimes tried before he begins, even in nesting time. The Lark Buntings feed and sing through the fields, while the Prairie Lark sings, like the Wren,

with a good deal of fuss on feathers without any well defined cause. I should say in the instance of the Catbird singing, in Mr. Peck's paper, that it sang from pure expression of enjoyment in the music. The similarity in the evidences of kindred endowments in birds and the human species gives us a human interpretation. We have covered a great field with the word instinct to account for that which is not easy to explain, and made it stand for something inferior to reason in the mind of the thinker. So we cover bird life with its architectural display of reasoning faculties, its knowledge of the points of the compass, its unerring migratory courses, its time of coming and going at certain dates, with even its knowledge of unvarying notes in a scale, as instinctive. We might say that, if they were blind and deaf. They show us in all these things that we read them with closed understandings, or not at all. When my birds arrive in the spring, a half dozen varieties reaching the grounds in the night, and I go out to find in some instances, all singing at the same time I may be mistaken but it seems like a song of thanksgiving whether it is really so or not. I must differ with Mr. Peck also in the length of time that birds sing. The air is full of bird song in the morning and on sunny days in March—many birds having arrived early in the month. Nesting time is a long way off, and if one is afield in August and September, the song sparrow announces himself as emphatically as in the early spring. Meadow larks sing after they have gathered in flocks for migration. and so with blue birds. In March the Juncos will fill a tree and all sing at a time, and Canadian tree sparrows can be heard on the sunny side of a mill any day in the winter, if it is not too cold. But the subject is interminable and will not admit of much argument in a short paper. It would appear as if the question of where the voice is situated in a bird's throat cannot be definitely settled by evidence. What chance has it through research in solving the problem of why a bird sings? It is self evident that we cannot interpret from any fixed standard, and the psychic point of view is as tenable as any other. There is no doubt that the different cries and sounds from birds, all have their meaning and express alarm, fear, pain and even hate. Birds may dwell together in peace, but they congregate with their own species, and do not take to mixed communities. They are necessarily mixed in nesting time, when a truce appears to be held for business purposes.

*The Third Annual Congress of the Iowa Ornithological Association.

MANCHESTER, IOWA, SEPT. 1, 2, 3, 1897.

FIRST SESSION.

The first session of the Iowa Ornithological Association was called to order on the afternoon of the first day of September with Pres. J. H. Brown in the chair.

Thursday evening, Sept. 2, was decided upon as the meeting to which the public should be especially invited. Four papers of a not too technical nature were selected for the occasion. Two papers, "One Small Piece of Ground" by Mr. Burtis H. Wilson, of Rock Island, and "The Summer Birds of the Oneota Valley" by Mr. Paul Bartsch, of Washington, D. C., were read, both calling forth a long and interesting discussion by all present.

SECOND SESSION.

For the second session it was decided to drive out to the Fisheries, a few miles out of Manchester, and there listen to the reading of papers. One paper, "The Psychic Nature of Bird Song," by Mr. M. E. Peck, was read. A very warm discussion, led by Mrs. Mary Rann, ensued. The paper presented a very fruitful field for thought.

THIRD SESSION.

"What Can the Members do to aid the Association?" - - - - - - - - H. J. Giddings, Sabula, Iowa.
"Notes on the Inter-breeding of the Red-shafted and the Yellow-shafted Flickers." - - - E. E. Irons, Council Bluffs.
"Summer Haunts of the Swamp Sparrows," J. Eugene Law, Perry.
"Summer Birds" - - Hiram Heaton, Glendale.
"A Talk on the Manchester Agassiz Association" Mrs. M. A. Triem.

Several new arrivals at the Convention also added a new interest to to the discussions.

FOURTH SESSION.

At the opening session the following papers were presented:

"Through Naturalist's Eyes," - - - D. L. Savage
"Bird Notes," - - - - W. W. Loomis
"On the Probable Occurence of Fossil Birds in Iowa," Wilmon Newell
"The Practical Side of the Ornithologist's Work." J. H. Brown

*Through the carelessness of our former printer these minutes were omitted from the October, 1897 Iowa Ornithologist, when they should have been published.

Considerable interest was shown by the visitors present and a pleasant as well as profitable evening was spent by all.

FIFTH SESSION.

For the place of holding the fifth session, Mossy Glen, a most delightful as well as magnificent spot, was chosen. It is situated about fifteen miles directly north of Manchester, in Clayton county. This gully, one of the feeders of the Volga river, for it abounds in springs, opens to the north, and on either side at a distance of fifty yards or less apart perpendicular walls of rock rise to the height of from fifty to seventy-five feet, while at the upper end of the glen the washing out of the springs has produced a huge overhanging wall which protects a large amphitheater, not only from the noon day sun but from any direct rays whatever.

In this spot, on one of the hottest days of the summer, the members of the I. O. Association, scattered about and perched on Nature's stools in cool comfort, and with a projecting ledge for the President's chair, held a business meeting so intensely interesting that it was only aroused to a knowledge of the outer world late in the afternoon by a large Turkey Vulture, which after peering about several nooks and out-hanging rocks, finally settled on a large stub, which protruded from the rocks, directly over the heads of the members.*

BUSINESS MEETING.

The members present spent considerable time discussing the birds comprised in the annotated list now in the course of preparation. It was determined that an appeal be made to all members for a thorough study, with an eye to the differentiation of the eastern and the western varieties and the relative and actual abundance of the following: Red-tail, Great-horned Owl, Night Hawk, Meadow Lark, Grasshopper Sparrow, Lark Sparrow, Loggerhead Shrike, Maryland Yellowthroat, Robin, Blue Bird; a special study of the varieties occuring within the state of: Grebes, Loons, Gulls, Terns, Sandpipers, Arctic Woodpeckers, Horned Lark, Whipporwill, Longspurs, Redpolls, Juncos, Vireos, Waterthrushes, Chickadees, Wrens, Thrushes; the possible occurence of Prairie Sharp-tailed Grouse, Yellow-crowned Night Heron, Burrowing Owl, Summer Tanager, Barn Owl; the possible nesting of Franklins's Gull, Solitary Sandpiper; relative abundance of Traill's Flyoatcher, and Little. and Acadian Flycatchers, Least and Baird's Sandpipers, King Rail and Florida Gallinule, Sora and Virginia Rails; notes on the occurence of Harris's Sparrow, Savana Sparrow and White-crowned Sparrow.

*Several large views of the glen with members of the association scattered about on the rocks were taken, and the pictures (5 x 7) may be procured for fifty cents each by applying to Mr. Wilmon Newell, Ames, Iowa. The proceeds to go to the treasury of the I. O. A.

The report of the Treasurer was then read and accepted.

It was resolved, "That an assessment of one dollar each on all the members be made to settle the debt of the Association." The Association has been holding its own for the past year and when the back debt is lifted it will be self supporting,

It was resolved, "That the printing of the official organ be let to Mr. C. C. Tyron, of Avoca at nine dollars an issue."

A commiteee, consisting of Mrs. Rann, Mrs. Triem and Mr. Newell, was appointed to decide on a more suitable color for the cover of the official organ.

It was resolved, "That the Committee on Annotation sub-divide the A. O U. list among themselves, each taking a portion and devoting himself to the families included in that portion."

It was resolved, "That department heads be elected to do special work in the following branches: Migration and General Distribution; Economic Importance and Food Habits; Nidification; Seasonal Variation in Food, Plumage, and Habits."

SIXTH SESSION.

Adjourned Business Meeting, Sept. 4, 6:00 a. m.

There was a long discussion as to admitting members from outside the state to active membership.

It was resolved, "That Art. II. be removed from the Constitution and be made part of the By-Laws."

It was resolved, "That Section I. of this clause be amended so that the word "three" shall be struck out and "four" inserted in its place, and the words "and Corresponding Members" be added."

It was resolved, "That the By-Laws be temporarily waived and Mr. Lynds Jones of Oberlin, Ohio, and Mr. Burtis H. Wilson, of Rock Island, Ill. be admitted to Active Membership."

The Congress then proceeded to the election of officers. They were elected as follows:

OFFICERS:—President—J. H. Brown, Maqoketa, Iowa.

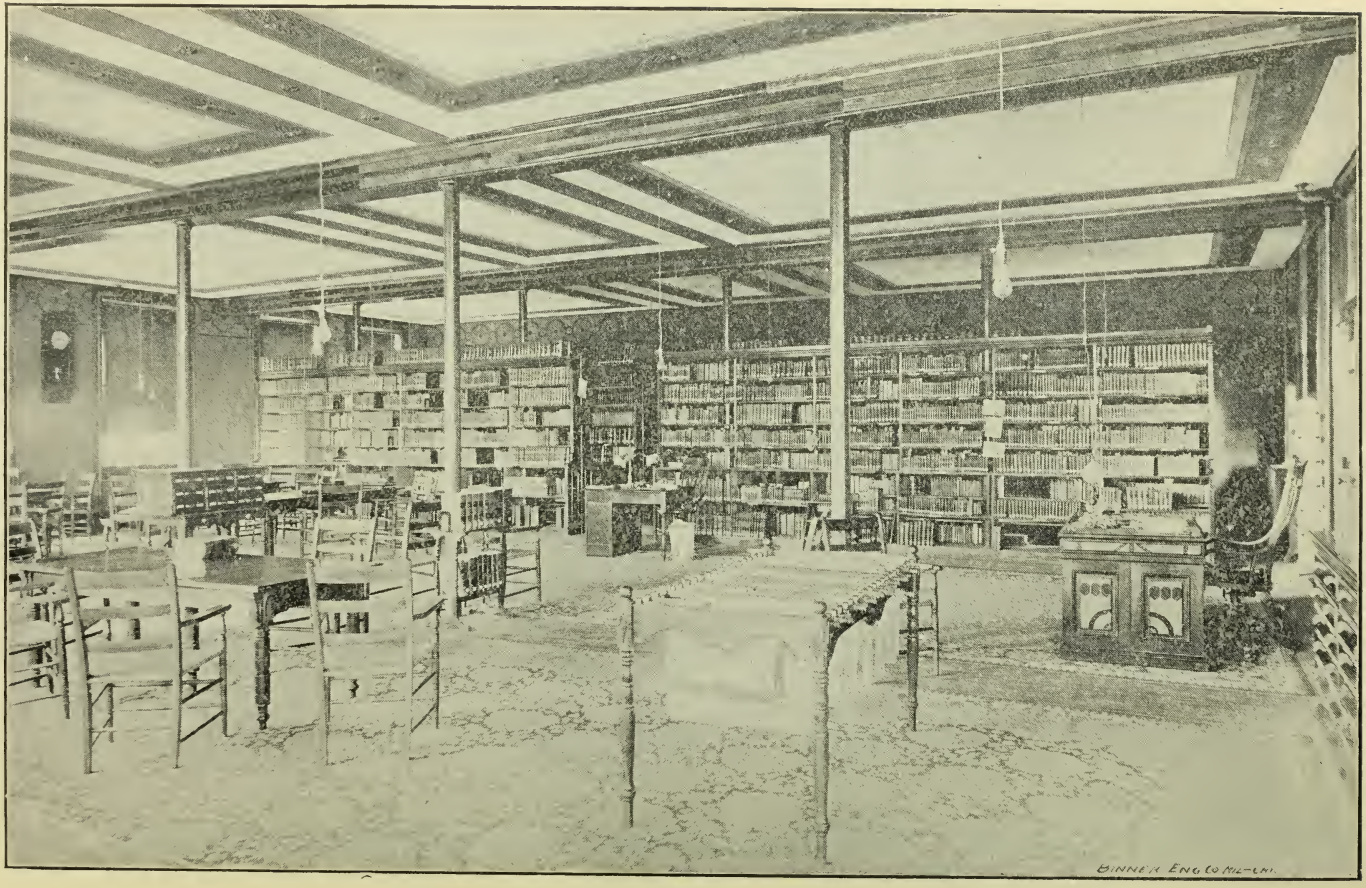
Vice-President—Mrs. M. A. Triem, Manchester, Iowa.

Secretary—J Eugene Law, Perry, Iowa.

Editor-Treasurer—D. L. Savage, Salem, Iowa.

EXECUTIVE COUNCIL:—Wilmon Newell, Ames, Iowa, Chairman.
Carleton R. Ball, Ames, Iowa.
W. W. Loomis, Clermont, Iowa.

FINANCE COMMITTEE:—Carl Fritz Henning, Boone, Iowa, Chairman.
Geo. H. Burge, Mt. Vernon, Iowa.
H. J. Giddings, Sabula, Iowa.



College Library, Iowa State College, Ames, Iowa

Department Heads :—Migration—Carl Fritz Henning, Boone, Iowa.

Nidification—J. H. Brown, Davenport, Iowa.

Economic Study—Wilmon Newell, Ames, Iowa.

Seasonal Variation—Paul Bartsch, Washington, D. C.

It was resolved, "That the Secretary, as Chairman, with two others, draw up resolutions on the death of Mrs. Gus Walters, to be printed in the I. O., and in the minutes of this meeting, and a copy of the resolution be sent to the local paper at her home and to the relatives of Mrs. Walters."

It was resolved, "That the Agassiz Association and others of Manchester who have helped to make the Congress a success be tendered a vote of thanks for their kind entertainment and hearty co-operation."

It was resolved, "That Ames be the next place of annual meeting and that it be held during the third week of August, 1898."

It was resolved, "That a Chairman of a Program Committee be selected and he be given power to choose his assistants. This Committee to see in ample time that an extensive program be selected for the next Congress."

Mr. D. L. Savage was selected as the Chairman of this Committee."

It was resolved, "That Art. III. Sec. 1. of the Constitution be so amended as to include an Advertising Manager as one of the officers of the Association." It was also resolved, "That Art. IV. Sec. 6 be made to read: The duties of the Advertising Manager shall be to promote the Commercial Interests of the Official Organ."

The Secretary was instructed to cast the unanimous vote of the Association for Mr. C. C. Tryon of Avoca for this office.

The Association held a long discussion on the methods of bringing our work before the people.

It was resolved, "That two Committees be appointed, one to get up a popular lecture suitable for presentation to High Schools, the other to get up one suitable for presentation before the meetings of the Farmer's Alliance." The plan, though not quite ripe as yet, is to have these lectures on hand in presentable shape and hold them ready to send to any of the members who see a chance for presenting them.

For the first above named committee Mrs. M. A. Triem and Mr. J. H. Brown, were selected. For the second, Mr. D. L. Savage, Mr. Geo. H. Burge, and Mr. Hiram Heaton.

The congress then adjourned to meet the third week in August, 1898, at Ames, Iowa.

J. EUGENE LAW, Secretary.

Economic Study.

In compiling the work on Iowa Birds, a study of the economic phase of Ornithology and especially of Iowa Ornithology, is essential. With this end in view therefore every active member is solicited to preserve the stomach, with contents, of every bird collected by him, regardless of season or species. The stomachs should be preserved in ordinary or wood alcohol, 90 per cent solution, or in a 2 per cent solution of formic aldehyde. The alcohol is to be preferred.

Each stomach should have attached to it a label written in *India ink* or *lead pencil*. This label should correspond to numbered data recording the locality, date. name of bird, sex, character of place collected, and time of day, together with any remarks that may prove of use. Identification whenever doubtful should be made certain by saving the skin and numbering it to correspond to the stomach. The skin can then be sent in with the stomachs and after identification will be returned to the owner.

The Association will co-operate with the Biological Survey, U. S. Dept. of Agr. in this work. It is hoped that *every* member of the I. O. will take an active part in this work, and do as much as possible, adding thereby both to the reputation of our Association and to the value of its subsequent publications.

Those who are prepared to enter into active work from now on, and those wishing further information are requested to correspond *immediately* with the Chief of Economic Dept., Wilmon Newell, Agricultural College, Ames, Iowa.

A Call to Duty.

At the Third Congress of the Iowa Ornithological Association held at Manchester, Iowa, Sept. 4, 1897, our Association decided to appoint department heads to take up special work and aid the Annotation Committee—these heads to take up four branches, as follows: Economic Study, Nidification. Seasonable Changes, and Migration, of the last of which I had the honor of being chosen Chief.

J. Eugene Law, Secretary of our Association writes, that regarding migration, the plan is to make a special study of the routes chosen by the birds through Iowa—also a study of Bird Waves.

□ In the winter of 1881-2 Prof. W. W. Cooke, attempted to secure the assistance of the ornithologists of Iowa in studying the migration of birds—changing his residence from Iowa to Minn., necessitated a modification of

the original scheme, and it was decided to increase the size of the original area to include the whole Mississippi Valley.

In 1888 the U. S. Dept. of Agr., Division of Economic Ornithology, published Bulletin No. 2, W. W. Cooke's "Report on Bird Migration in the Mississippi Valley for the years 1884-5."

Since then no attempt has been made to my knowledge to gather material for a report on bird migration in Iowa.

Our Association has taken up the work and as Chief of this interesting branch of the study, I earnestly ask the hearty co-operation of *every member* of the I. O. A. Without your aid, there can be no success.

Let us go to work in earnest—let us put down our daily records full and complete, and then when our notes are published in connection with the "Birds of Iowa," each individual member of the Association will have reason to feel proud of the work so cheerfully done. Get ready for the spring migration—due credit will be given in the forthcoming report to every one contributing to its success. Yours in the work,

CARL FRITZ HENNING,

Chief Migration Department. Boone, Iowa.

Bird Migration in Iowa, Instructions to Collaborators.

The department particularly desires from each observer a brief but careful description of the principle physical features, including latitude, longitude and altitude of the locality which is the seat of observations.

The data collected may be arranged conveniently in three general classes: *a*. Ornithological Phenomena; *b*. Meteorological Phenomena; *c*. Contemporary and Correlative Phenomena.

a. ORNITHOLOGICAL PHENOMENA.

Each observer is requested to prepare, at his earliest convenience, a complete list of the birds known to occur in the vicinity of his station, and to indicate (by the abbreviations inclosed in parentheses) to which of the following five categories each species pertains:

1. *Permanent Residents*, or those that are found regularly throughout the year. (R.)

2. *Winter Visitants*, or those that occur only during the winter season, passing north in the spring (WV).

3. *Transient Visitants*, or those that occur only during the migrations, in spring and fall (TV).

4. *Summer Residents*, or those that are known to breed, but which depart southward before winter (SR).

5. *Accidental Visitants*, or stragglers from remote districts (AV).

It is desirable also to indicate the relative abundance of the different species, the terms to be employed for this purpose being: *Abundant*, *Common*, *Tolerably Common*, *Rare*.

If you are in a position to observe the lines of flight of birds, have you noticed whether or not such lines are influenced by the topography of the country, and if so, to what extent?

If a mountain intercepts the line of flight, what kinds of birds pass around it, and what kinds pass over it?

What localities in your neighborhood are sought as resting-places by the various kinds of migrating birds? Can you give any reason for this selection?

What kinds of birds generally move in flocks, and what kinds in pairs or singly?

Are you familiar with any kinds of birds in which the males and females, and old and young, fly in separate flocks? In many species the males arrive in advance of the females, hence it is important to note the sex of the first comers, and the date at which the opposite sex is first seen.

Have you observed from year to year any increase or decrease in the numbers of any kind of bird known to you? If so, do you attribute such change to altered conditions in the bird's breeding grounds? If not, can you assign a cause?

Have you observed the increase or decrease of one species to affect the numbers of another species. If so, can you explain the fact?

Has any kind disappeared altogether, and if so, can you assign a cause for this disappearance?

Among the birds which are now common about your station is there any kind that was formerly rare or absent? If so, can you explain the fact?

Among the birds which breed regularly in your vicinity have you ever observed an individual which by some personal peculiarity (such as the presence of white or dark feathers where they do not belong, or by some deformity) could readily be distinguished from others of its kind? If so, has this bird returned to the same place to nest year after year?

In recording arrivals and departures it is highly important to distinguish the movements of irregular stragglers, of the advance guard or "van," and of the principal mass or "bulk" of the species. For this purpose observers are requested to note:

1. When the species is first seen.
2. When it is next seen.

3. When it becomes common.
4. When the bulk departs.
5. When the last individual is seen.

In addition to the above data, which *all* observers are requested to furnish, the Department particularly desires exact records of every increase and decrease in the numbers of a given species over a given area; for it is only by the knowledge of the daily fluctations of the same species in the same place that the progress and movements of a "flight," or "bird-wave," can be traced. Such data can be contributed by experienced observers only, and in their procurement much time must be spent in the field. During the progress of the migratory movement the observer should go over the same ground day after day, and, if possible, both early in the morning and late in the afternoon. He should visit woodlands, thickets of dense undergrowth, and open fields; and if possible, both swamp and upland should fall under his daily scrutiny.

The above may be regarded as *essential data*. There are many other noteworthy details that bear more or less directly upon the complicated problems involved in the study of migration. Among such may be mentioned the bodily condition of the bird (whether fat or lean), the molut, and the periods of song. The time of mating, when observed, should always be recorded.

(*b*) *Meteorological Phenomena.*

Information is desired upon:

1. The direction and force of the wind.
2. The direction, character, and duration of storms.
3. The general conditions of the atmosphere, including rainfall.
4. The succession of marked warm and cold waves, including a record of all sudden changes of temperature.

(*c*) *Contemporary and Correlative Phenomena.*

The Department desires that the data under this head be as full and complete as possible, and requests exact information upon:

1. The date at which the first toad is seen.
2. The date at which the first frog is heard.
3. The date at which the first tree-toad or "peeper" is heard.
4. The dates at which certain mammals and reptiles enter upon and emerge from the state of hibernation.
5. The dates at which various insects are first seen.
6. The dates of the flowering of various plants.
7. The dates of the leafing and the falling of the leaves of various trees and shrubs.
8. The dates of the breaking up and disappearance of ice in rivers and lakes in spring, and of the freezing over of the same in the fall.

CARL FRITZ HENNING,
Chief of Migration Dep't. 922 Eighth St. Boone, Iowa.

Notes and News.

Owing to the illness of the editor, Mr. Savage, the publication of the January issue has been delayed. The publication of that issue has been placed in the hands of the undersigned and matters have been pushed with the greatest possible speed. Mr. Savage cannot in any way be blamed for the delay—on the contrary he deserves the sincere thanks of the Association for the earnest efforts he has made, and for the amount he has accomplished, working as he has been, under so many difficulties.

Thanks are also due to Hodson Bros , printers, for their alacritcity and neatness in printing the present issue. We are also under obligations to Prof. C. R. Ball, of Ames, for much valuable assistance.

We can assure our subscribers and fellow members that arrangements will soon be completed whereby future issues will appear on time.

CARL FRITZ HENNING,
Chairman Finance Com.

WILMON NEWELL,
Chairman Ex. Council.

Boone, Iowa, Feb. 26, 1898.

One of the most attractive exhibits in the Louisiana section of the History Building at the Tennessee Centennial Exposition was the original painting of the wild turkey, by Audubon and Bachman. The bird was killed on a Louisiana plantation and taken to the home of Col. Percy Smith, where it was painted by Bachman. At the time of the purchase of the painting the Smithsonian Institute offered $4000 for it. The colors are still as fresh and bright as when first painted.

Chief Henning of the Migration Department, writes the editor that if necessary he will ask active members Coleman and Andrews of his city to assist him in compiling the spring migration reports if they come in too fast, and if worse comes to worse, he will call on brother Newell of the Agricultural College at Ames, to help him out. Let us flood him with notes on the spring movements of our beloved birds and make him keep his word.

Since our last issue the following persons have been admitted to active membership: Miss Charlotte M. King, Ames; Messrs. B. B. Hill, Ames; Fred O. Schmidt, Boone. Let the good work go on.

The Ornithological Museum of the Agricultural College at Ames, has recently undergone a complete rearrangement, now making this extensive collection readily accessible to both general and scientific students as well as to the general public. It is well worth a visit.

Do not forget to have in mind a suitable subject for an exhaustive paper to be read at the next annual meeting of our Association, at Ames in August. Though early yet, we should make ample and thorough preparation. This will probably be the greatest and most successful of any meeting thus far held in the history of the Association.

New Books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor who will examine them personally and give them due consideration.

"Bird Life," a guide to the study of our common birds, by Frank M. Chapman, with seventy-five full page plates and numerous text drawings, by Ernest Seton Thompson. New York, D. Appleton & Co. 1897.

"Bird Life" is indeed a guide to the study of our common birds, for any one who is fortunate enough to be the owner of this valuable work, by Mr. Frank M. Chapman. The opening chapters are:

I The Bird, Its place in Nature and Relation to Man. II The Living Bird. III Colors of Birds. IV The Migration of Birds. V The Voice of Birds. VI The Nesting Season. VII How to Identify Birds, and a field key to our common land birds. About two-thirds of the volume is taken up with ably written biographies of "our common birds." The 75 full page plates of birds and the numerous drawings are by our well known ornithologist and artist Ernest Seton Thompson. Mr. Chapman and the publishers are to be congratulated on securing the services of this most excellent artist of our feathered friends. "C. F. H."

Gleanings from Nature. No. 1. "Some Oological Abnormalities," by J. Warren Jacobs, will be out in a few weeks—not later than Feb. 15th. Among the descriptions of freak sets will be found two sets from Jasper County, Iowa, namely, Prairie Horned Lark and Yellow Warbler.

"D. L. S."

"How to know the Ducks, Geese and Swans of North America," by Chas. B. Cory. Boston. Little, Brown & Co. 1897.

How to know the ducks, geese and swans need not puzzle any one who has a copy of this most excellent work by Charles B. Cory, all the species being grouped according to size and color. The work is intended to meet the wants of a large number of persons who are interested in birds and would like to know their names but often find it no easy task to identify them by the "bird books." It is of especial value to the sportsman. The

"How to know the Shore Birds (*Limicolae*) of North America," by Charles B. Cory. Boston. Little, Brown & Co. 1897.

Chas. B. Cory's new work. "How to know the Shore Birds" is as valuable for the working ornithologist as it is for the sportsman and should find a place in the library beside its companion book, "How to know the Ducks, Geese, and Swans," by the same author. Mr. Cory gives a good

description of the *Limicolae* of North America (south of Greenland and Alaska) and groups all the species according to size and color. The illustrations are by Mr. Edward Knobel. "C. F. H."

"Chapters on the Natural History of the United States" by R. W. Shufeldt M. D., Captain, Medical Department, U. S. Army (Retired). Associate in Zoology, Smithsonian Institution. Studer Brothers, publishers. 156 Fifth Ave. New York. Issued under the auspicies of the Natural Science Association of America. New York, U. S. A. 1897. Large octavo. Extra cloth, Gold Top, cut or uncut edges. $3.50 net.

"Chapters on the Natural History of the United States" is publication No. 2 issued under the auspices of the Natural Science Association of America, under whose auspices was issued as publication No. 1 that great work knwon Studer's Popular Ornithology "The Birds of North America," a superb imperial quarto volume of 110 artistic engraved colored plates, 12 by 15 inches, representing all our birds true to nature, with a copious text embracing the observations made by the most eminent writers on ornithology. Dr. Shufeldt's valuable new book (publication No. 2) is a handsomely printed large octavo volume of 400 pages. It is illustrated by many full page plates and numerous text figures. The life histories are written in a thoroughly popular style and will prove to be instructive to every student of nature. One of the chief features of the work consists of the elegant half-tone plates, reproduced from a series of photographs all made by Dr. Shufeldt himself from the living forms. The work is one of the best that has appeared of late years and should be in the library of every working ornithologist in the United States. "C. F. H."

"Bird Neighbors," that most excellent work by Neltje Blanchan, with an introduction by our favorite "John Burroughs," is having a remarkable sale, the first edition of 5000 copies being exhausted soon after publication. (published by Doubleday and & McClure Co.) A full review will be given in our next issue. "C. F. H."

Ord's Zoology, a reprint from Mr. Ord's private and only known copy of the Second American edition of Guthrie's Geography (edited by Samuel N. Rhoades), came too late for review in this issue of the Iowa Ornithologist. Ord's Zoology is indispensable to the working zoologist. A review will be given in our next issue. "C. F. H."

Nests and Eggs of North American Birds (Fifth Edition) by Oliver Davie is announced by the publishers as ready for delivery March 1st. This is the fifth edition of this popular work and will undoubtedly have an immense sale. Our friend Davie is to be congratulated. "C. F. H."

The following books are announced by the publishers:

"The Birds of North America" by Jacob H. Studer. Illustrated in colors. Studer Brothers. New York. $40 to $45, (Subscription price $20 to $22,50).

"Audubon and his Journals." By Maria R. Audubon. With Notes by Dr Elliot Coues. Illustrated, 2 vols. 8vo. $7.50.

"The Gallinaceous Game Birds of North America." By Daniel G. Elliott. Second edition, illustrated. pp 220. Francis B. Harper. $2 50.

Exchange Column.

Brief special announcements, "Wants," "Exchanges," "For Sale," inserted in this column free to all members and subscribers of the IOWA ORNITHOLOGIST. Dealers can use these columns at regular advertising rates only.

WANTED—Walter Raine's "Bird Nesting in Northwest Canada," Goss, "Birds of Kansas," and Vol. I of the Nidiologist. Have to offer in exchange for the same, specimens, or books on Ornithology. Send cash offer or list of specimens desired and inclose stamp for reply. Your chance for a good bargain. Carl Fritz Henning, Boone, Iowa.

WANTED—A good second hand copy of Hornaday's "Taxidermy and Zoological Collecting." Write at once, stating condition of book and lowest cash price. C. L. Passmore, Iola, Wis.

GET your eye on our premium offer in this issue. Subscribe—and get your friends to subscribe with you. and win some of the finest prizes ever offered by any magazine. Iowa Ornithologist, Salem, Ia.

WANTED—A good camera. either Kodak or view, for general purposes. I have to offer in exchange any of my 150 mounted specimens of birds in my collection, or complete sets of eggs with data. A large series to select from. Carl Fritz Henning, Boone, Ia.

WANTED—To exchange plants of Iowa for grasses from Iowa and other states. Also for sale or exchange a herbarium consisting of three hundred specimens, representing two hundred and fifty species of Iowa plants correctly named and neatly mounted- Correspondence solicited. C. R. Ball, Ames, Iowa.

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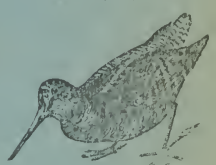

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Big Premium Offer

A number of premiums were offered last year and the result was so satisfactory that we have decided to make a larger offer now. We want

500 New Subscribers

before the next issue. Note the magnificent offer made by Wilmon Newell of Ames, of a finely mounted Snowy Owl, cash value of which is

$15.00

to the person obtaining the largest number of subscribers. This premium will not be given to any person securing less than forty subscribers. Again, Mr Carl Fritz Henning, of Boone, makes

Another Big Offer

as follows: "To the person securing the largest number of subscribers to the IOWA ORNITHOLOGIST I offer the prize, $5.00 worth of sets, including a set of Krider's Hawk, ½. which was offered by Pres. Brown last year, and which I had the pleasure of securing. The person receiving the prize offered by Mr. Newell however, will be barred from receiving this one." In both the above offers the securing of a new active member to the Association shall count as two subscriptions, and the securing of a new associate member, as one subscription. Both offers will close June 1, 1898. Show this issue to your friends and you will have no trouble in securing subscribers. Go to work *at once*, do not wait until someone else has secured all the subscribers in your neighborhood.

IOWA ORNITHOLOGIST, Salem, Iowa.

Go forth under the open sky
And list to Nature's Teachings.

The Iowa Ornithologist.

APRIL 1898.

Vol. 4. No. 2.

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Devoted to Ornithology and Oology,
Published at Ames, Iowa.

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. . CONTENTS . .

Bird Protection—David L. Savage..... 1
On the Probable Occurrence of Fossil Birds in Iowa—Wilmon Newell... 5
The Summer Haunts of the Swamp Sparrow—J. Eugene Law..... 8
Interesting Notes—Arthur A. Jeffrey.....10
Are You Watching the Birds?.....12
Notes and News.....13
Book Review.....15
List of Members of the I. O. A.....17

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LAW, J. EUGENE, Secretary.
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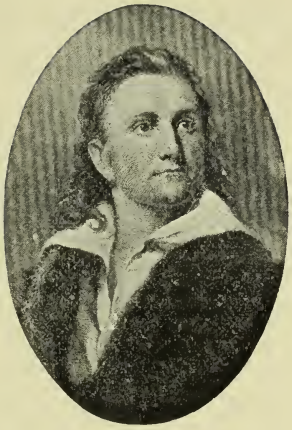

SCHALLER AUDUBON SOCIETY,

FOR THE PROTECTION OF BIRDS.

Founded June, 1897.

A Robin Pie.

BY IONE G. DANIELS.

In the days of pagan Rome, Horace and Ovid refer with approval to feasts of song birds, including roast thrush and "nightingales of monstrous price." Varo tells us that the epicure gratified his palate and his ear simultaneously, feasting upon the delicate warblers, while others, unconscious of their coming doom, were discoursing, meanwhile, the most exqusite music. The incident related in this story, occurring in our own midst, as it were, after a period of more than 2000 years, proves to us that with all our boasted civilization, remnants of savagery still exist.

Sitting by the open casement on a summer's morning, looking out upon a beautiful lawn, bordered with shade trees, in the town of Sheldon, Iowa, I overheard a coterie of boys—each armed with a small gun—discussing the merits of their murderous weapons, and the number of birds they had already shot since the opening of the season of bloom and song. I was at once interested, as I had been guarding a robin's nest, in a tree near by my chamber window and knew the predilection of the "small boy" for these song birds. As they drew nearer, I recognized two of the lads as sons of a prominent citizen, and was greatly shocked to hear one of them say, "I have killed fifty robins since our currants were ripe."

While pondering over this awful confession, and determined to lend my influence to stop this wickedness, the sequel to the morning's episode occurred. I was invited to a five o'clock tea, where eighteen Robin-red-breasts were served up in a pie! I refused my piece, saying, that I would as soon think of eating my grandmother!

Returned home full to the throat, sat down and dashed off the following:—

A Robin Pie.

It hath been said by many an one,
"There is nothing new under the sun."
But the phrase has lost its pith to me,
Since yester-night at a Sheldon "tea."

The feast was great, the guests were few,
The edibles choice—and one was new;
So new, it startled an untrained ear
The very name, of the dish, to hear.

Not since the famous nursery "fake"
Of the "four and twenty" blackbird bake,
In all the novelties 'neath the sky,
Had I ever heard of a Robin Pie!

'Twas a dish of song! The sweets of spring,
Smothered and baked in a pastry ring—
Just eighteen notes and thirty-six wings,
Missed from a world of beautiful things!

It may seem small to estimate these
On a planet swarming with birds and trees,
But, if in a flock of sparrows, one
In falling, shadows a sea of sun—
And nothing escapes the Father's eye,
In the blazing spaces of world and sky:—

Then am I glad I rev'rently hold
The russet crimson and Roman gold
Of the Robin's breast! Its life and mine,
In touch with Heaven and the life divine!

Sioux City, Iowa.

This leaflet can be obtained of Miss J. E. Hamand, secretary of the Schaller Audubon Society, Schaller, Iowa. Price: 100 copies 40 cents; 20 copies 10 cents, postpaid.

NO. 1--2M.

Iowa Scenery—College Park, Ames, Iowa.

"Think of your woods and orchards without birds!
Of empty nests that cling to boughs and beams."—Longfellow.

BIRD PROTECTION.

BY DAVID L. SAVAGE

How to protect the birds has been with me a subject of grave consideration for some time. Having always from my earliest recollection been an ardent admirer of the "little brothers of the air." I cannot imagine an existence apart from the love and companionship of the birds.

You will agree with me that something should be done and done quickly to spare their innocent lives, for from all sides come reports of a decrease in native birds, due especially to the increasing slaughter of birds for game, the demand for feathers to supply the millinery trade, and the breaking up of nests to gratify the egg-collecting proclivities of small boys. Indeed, it is due time that we, who are admirers of the feathered population, were awakening ourselves and taking some united action to stay the hand of the destroyer.

It might be well for us to spend a few moments in considering these three elements which are at war against bird life.

Laws, stringent enough and enforced enough will protect our birds from the gun and snare of the sportsman. Our state legislature took a very wise step last winter when it passed more stringent laws to protect this class of birds. In the main the law is excellent, now all that is needed is the enforcement of the laws in force. We have reports from some counties that hunting itself, and the slaughtering of innocent birds, is held as such a sacred priviledge of the sons of this "land of the free" that nobody dares to interfere. The right to slaughter seems to be the ideal prerogative of the American and the true exponent of liberty. However, I am glad to be able to state that in Henry County the game laws are very much respected. It is not from this side that we need to be the most alarmed.

Upon looking at the second foe, the demand for feathers to supply the millinery trade, we gaze upon a deplorable scene. In America alone we find at least seven million five hundred thousand (7,500,000) birds sacrificed annually to decorate hats and bonnets. More birds than are in any public museum or private collection of our land. It is hard for the mind to conceive of such vast numbers of birds and to think that they are sacrificed for a worse than useless purpose. What is still more irritating, the ladies cannot understand how they are in any way responsible for this terrible slaughter so long as no individual bird is selected and killed for their individual purpose. They say: "the birds will be killed anyway."

It is high time the ladies were receiving some enlightenment concerning the enormous destruction of life which this long established, but barbarous custom of wearing feathers for ornamentation entails.

Although immense numbers of song and insectivorous birds are used for this purpose, the greatest rage is for Egret plumes.

These dainty, graceful feathers, unlike the distorted skin of some poor humming bird or warbler, carry with them no suggestion of death, and many a woman on whose bonnet they are placed, is wholly ignorant of the unspeakable cruelty which the taking of these feathers entails. If each plume could tell its own sad history, every human woman in the land would raise her voice against a fashion which threatens with extermination the most beautiful of our birds.

We hear it said that the feathers can be procured without injury to the bird, or that they are found after being shed; both statements are absolutely false. The plumes constitute the wedding dress of the white Egret, and are only worn during the nesting season. The wholesale dealer sends the plume hunter into the southern states where these birds nest in large colonies or rookeries, often hundreds nesting near together. The old birds are not very shy at this season, and they leave the nest where the young birds are, very reluctantly, therefore, the hunters find them an easy mark and in a few days most of the parent birds of the colony have been killed, while the nestlings are left to die of starvation. One plume hunter boasts of having killed 300 Egrets one afternoon and another boasts that he and his party killed 130,000 birds during one season.

"Dead fell the birds, with blood stains on their breasts,
Or wounded crept away from sight of man,
While the young died of famine in their nests;
A slaughter to be told in groans not words.

What is to be done?

True, we have laws to protect our birds, but laws are powerless when a women has a fad in her head and a feather in her hat.

It is a melancholy fact that among the enemies of our birds two of the most destructive and relentless are our women and our boys. The boys by inheritance have a mania for collecting eggs and killing birds. It will not take us long, however, to dispose of the small boy question. What is the most potent influence in this world over the boy? It is mother. How can she teach her children gentleness and mercy to the weak and reverence for life, when by her laws, and her actions she contradicts the very thing she teaches? It is to be hoped, and I believe it will be a fact, that at no distant period of time, there is going to appear a new woman who will bring with her new decorations for her head gear, a woman who will spurn the idea of wearing a dead bird on her hat. Then mothers can teach their children to love the birds, and teach them to observe the wonders of bird life by making them acquainted with the wonderful works of God's creation, they will soon begin to love them. The better they become acquainted, the more they will love them; the friendship once sprung up between them, will be the best protection.

Finally a few suggestions pertaining to the solution of the problem of bird protection might be in order. It will take time and much patient, earnest effort to accomplish the desired end, even with the hearty cooperation of all persons interested in birds. The Iowa Ornithological Associa-

tion should be doing more definate and united work along this line. At the next annual meeting of the Association there should be appointed a committee on protection of Iowa birds, consisting of five members, giving them authority to increase their number if desirable. Until that time let each member act as a committee of one and observe the following suggestions:

1. That it is the duty of each member to instruct himself as to the economical value of birds by reading all the publications on the subject, that he or she may be prepared to instruct any one with whom they may be thrown in contact.

2. Members should also be prepared and willing at all times to address farmer's institutes, woman's clubs, and any other gathering of people where the subject of bird protection and the value of birds to the people can be urged.

3. Another duty is for members of the Association to urge upon their representatives in the state legislature the advisability of passing proper laws for the protection of birds, including the so called birds of prey, this can be done on the ground of their economic value to the agricultural districts, if for no other reason.

4. Members should take every opportunity to talk to educators urging them to teach the children about bird life, and to that end should prevail upon as many teachers as possible to join our association.

5. It is further recomended that a law establishing bird day in conjunction with arbor day be urged for passage in our state. The very simple but clear law now on the statute books of Wisconsin is recomended as a model It has been urged that two holidays are objectionable, therefore as arbor day and bird day are allied in purpose, a law making both observable on the same day is advisable.

In conforming with the law of Wisconsin, Governor Edward Scofield issued the following proclamation:

"I do hereby designate and set apart April 30th next, as arbor and bird day, and recomend that all public schools, colleges and other educational institutions of the state and citizens generally observe the same in a proper manner "

"I do recomend that the day be devoted to the planting of trees. shrubs, and flowers in school grounds and public parks. to the end that in all school and other public exercises held upon that day special attention be paid to our native birds, in order that the children of the state may learn to find pleasure in a knowledge of the habits and characteristics especially of the various song birds, and that there may be cultivated a higher regard for bird life."

Mr. George A. Morrison of Fox Lake, Wis., gives a very interesting account of the influence of bird day on the boys of his town.

"For some time there had seemed to be a growing interest manifested on the part of a number of the boys in the characteristics and habits of several of our most common birds. The program on bird day seemed to awaken them still more, for in the succeeding weeks, during the spring emigration, they often came to me asking about the song of some bird

they had undoubtly frequently heard before, but now it was heard in a different way, it had a meaning, and they learned to recognize the song of several birds."

"During the nesting season I think there were but few nests robbed, and fewer birds killed just for fun, which goes to show that the small boy, however malicious, can be taught to respect and love the friends of the air, if the right course be taken."

6. Let us work to introduce bird study into the schools along with Botany.

While legislation may be of vast benefit in protecting all bird life, yet I firmly believe that the true solution will be the education of the children of our schools, both public and private. They should be taught in every grade from the kindergarten to the college, not only the aesthetic but the economic value of the birds Bird protection must be the outgrowth of public intelligence rather than sentiment.

When people are taught the economic value of birds, that bird protection is a matter of dollars and cents to them, bird protection will be assured. It is found to be extremely difficult to convince the great bulk of the adults of the present day of the economical value of birds and that they should not be destroyed. In a generation it will be possible to change this sentiment so that every adult will recognize the importance of birds as aids in preserving the economical balance of nature.

The American Ornithologists' Union has a committee on protection of North American birds which has done most excellent work the past year. Some of the above suggestions were from them. They have distributed thousands of leaflets and column after column has appeared in the public press relative to the cruelty, necessitated by the use of feathers for millinery ornamentation.

Their work has been carried on for the most part under the management of Audubon societies. Very valuable work is being done and will be done in the future by these societies.

The first of these, the Massachusetts Audubon Society, was organized in 1886. As each one is planned on the same lines, and with the same objects in view, a quotation from the prospectus of the Massachusetts society will serve to give a character of the work it hopes to accomplish.

"The purpose of the society is to discourage the buying and wearing for ornamental purposes the feathers of any wild birds, and to otherwise further the protection of our native birds. We would awaken the community to the fact that this fashion of wearing feathers means the cruel slaughter of myriads of birds, and that some of our finest birds are already decimated, and may ultimately be exterminated by the demand for their feathers. We would make an appeal to all lovers of nature, since by this reckless demand of fashion the woods and fields are being stripped of one of their chief attractions, and the country deprived of indispensible friends of agriculture."

Any person is elegible for membership who is willing to subscribe to the following single pledge: "Being in sympathy with the principles of the

Mass. Audubon Society, I hereby agree not to purchase or encourage the use of feathers of wild birds for ornamentation." A very small fee is required of members, the same being used solely for the purpose of printing and disseminating the necessary literature on the subject.

As a striking sign of the influence of the Mass. Society, it may be stated that one of the fashionable milliners of Boston is a member of the society and consequently will not sell the plumage of wild birds to customers.

Such societies are at work in nearly every state in the Union. But upon looking at a resumme of the work done in each state, I am sorry to see that Iowa stands in the background.

No State Society, and the first local Audubon Society was founded in June of the past year, 1897, at Schaller, Iowa, with Miss J. E. Hamand as secretary. This society is in a flourishing condition, has nearly 200 members, and has recently issued a little leaflet which contains much food for reflection.

It is to be hoped that before the close of another year it may be reported that Iowa has a State Audubon Society.

ON THE PROBABLE OCCURRENCE OF FOSSIL BIRDS IN IOWA,

BY WILMON NEWELL.

Paper read before the third congress of the I. O. A.

It was the intention of the writer in preparing a paper for the I. O. A. to present the subject, "Geological Factors of Iowa Ornithology." This subject would naturaly divide itself into two parts as follows: The first part treating of the geological factors indicating pre-existing forms, such as fossils, etc., and the second part, of those geographical and topographical features of the State that have to do with the character and distribution of living forms. However as the first mentioned furnishes enough and more material than can be treated of in a paper of reasonable "shortness," I have seen fit to defer indefinately the treatment of the second subject, richer and more interesting though it is.

In treating of the possible occurrence of fossil birds within the state I have had recourse to the works of Calvin, Bain, Beyer, Marsh, Snow and others, gleaning here and there such items as bear upon the subject.

Up to the present time no representatives of the Class Aves have been found fossil in Iowa. This may be due to either of two causes. First, those formations in which we know that such remains *might* be found may not be sufficiently exposed or not have been well enough explored to determine their presence. Secondly, the formations of the State may be destitute of such remains. This last will be treated further on in the paper.

As to the first: as is well known, all fossil birds that have been found in

America occur in the Cretaceous, a formation comparatively recent in the geological time-scale. This formation occupies the greater part of the "plains" region west of the Mississippi river and extends from the Gulf of Mexico to the Arctic ocean. It is, in Dakota, Nebraska and Kansas, especially rich in vertebrate remains. The same area extends northeast into Iowa, its eastern limit being unknown but being probably somewhere between Ft. Dodge and Iowa Falls. The fact that it is covered with Drift to the depth of fifty to one-hundred feet makes investigation almost impossible.

The only typical exposure of this formation is along the Big Sioux river in Plymouth and Woodbury counties. The exposed portion here is of course very small in comparison with the highly eroded area of Kansas from which Prof Marsh, obtained so many valuable specimens. The Cretaceous in Iowa doubtless extends over nearly one-half of the state running far east along the northern border and far south along the western. Could the Drift be removed from this area and the Cretaceous studied we would doubtless find as rich deposits of vertebrate remains as in Kansas.

So far the United States Geological Survey has given no attention to this area and as yet the State survey has done little, the only work here having been done by S. Calvin, State Geologist.

The results of his work are to found in the proceedings of the Iowa Academy of Sciences for 1892.

Now as to the second cause of non-occurrence i. e. that the Iowa formations are destitute of the remains. While their presence has not been ascertained, their absence on the other hand has not been proved. The evidence going to show that they probably do occur is contained in the following paragraphs.

Samuel Calvin, State Geologist, in his study of the Cretaceous deposits near Sioux City has proved beyond a doubt that they represent the Cretaceous formations of Nebraska and Kansas described by Meek and Hayden. According to Calvin the exposure at Sioux City presents three distinct subdivisions of the Cretaceous as follows: The lower one consisting mostly of sandstones with a few shales, is the Dakota group. The middle shaley formation represents the Ft. Benton group, and the upper chalk deposit is the Niobrara group.

The last named formation extends over a large area of Kansas and Nebraska and is the formation from which Prof. Marsh has described over twenty species of fossil birds belonging to the orders Odontormae and Odontolcae. That the nature of these fossils may be more plainly understood the classification of birds as given by Marsh is here presented.

Class Aves.

Sub Class Ornithes, the modern birds.

Sub Class Odontormae, or toothed birds, embracing

Order Saururae.

Order Odontolcae.

Order Odontotormae.

The first order named, the Saururae, is represented by the Archaeop-

teryx, a fossil bird of Germany with which all ornithologists are familiar. The two remaining orders are separated by Marsh upon the character of the bill, the Odontolcae having teeth set in grooves and the Odontotormae in sockets. The former order is represented by Hesperornis and the latter by Ichthyornis, both of which were wading birds. The latter was a bird probably twice the size of a pigeon, the former larger, often five or six feet in length.

As has been said these birds occur in the same formation that is represented by the Niobrara group at Sioux City. They therefore lived at the time this deposit was formed. However as this deposit is of chalk and was therefore a deep sea deposit, the remains, if found at all in Iowa, would be found furher eastward at or near the shoreline of the Cretaceous sea that covered the entire "plains" region: The conditions for the preservation of organic forms along this shoreline were doubtless the same as those in Kansas and it is reasonable to suppose that birds occuring in such profusion and variety of species in the latter place would also be found as far north as the northern boundary of Iowa. Where this eastern shoreline is, or was, is not yet known. It may in time be discovered, or perhaps erosive agencies acting previously to the glaciation of this region have removed all shoreline deposits of that time.

Again in Vol. X, of the Trans. Kansas Academy of Sciences, Prof. F. H. Snow describes a bird track discovered in the *Dakota* group of Ellsworth county, Kansas. It will be noted that this is the same formation that occurs as the lower member of the outcrop at Sioux City. This track, according to Prof. Snow, was made by a bird having the elevated hind toe merely touching the ground, a character that at present is found in the Snipes and Terns.

The entire length of the track is two inches and much resembles the *Ichthyornis victor* of Marsh. Prof. Snow therefore concludes that the bird was probably a carnivorous bird, probably twice the size of a pigeon and with habits similar to those of the Terns of the present day. The principal thing of interest however, is that this track occurs in the same group (Dakota) that is found in most abundance along the Big Sioux river near Sioux City. We have every reason to believe then that sooner or later Avian remains will be found in the formation, as likely to be found near Sioux City as anywhere in the state.

As the Cretaceous formations in Iowa furnish immense amounts of gypsum and potter's clay, it is likely that their economic value will cause them to be more fully studied by Geologists. With this study undertaken by such experts as Calvin, Keyes, Beyer, Bain and others now on the State Geological Survey, the Ornithologists may expect this area of northwestern Iowa to produce some Avian curiosity which, if not a valuable discovery for Science, will at least furnish another of nature's marvelous works for Iowa workers to boast of.

DISCUSSIONS.

Dr. Abbott, of Manchester, a venerable and intelligent gentleman who is noted for the attention he has given Geology and who took

much interest in the I. O. A. meetings, says that White and Marsh state that the Sioux City formations are so similar to those of Kansas in which so many bird fossils have been discovered, that if investigation were carried on to a sufficient extent, like fossils would undoubtedly be found. "It seems that the fossil bird has not yet been found in Iowa," adds Mrs. Triem.

"No but I'm glad," adds the Doctor, "that some one has enough confidence to believe there will be found fossil birds in the state."

THE SUMMER HAUNTS OF THE SWAMP SPARROW.

BY J EUGENE LAW.

Paper read before the third congress of the I. O A.

While perhaps not even common in most parts of Iowa and perhaps unknown to a great many of our Hawkeye Ornithologists, and I myself have never met it strictly within our boundaries, yet I feel abundantly satisfied that it not only occurs as a migrant but even occasionally breeds within the state.

While on an outing in southern Minnesota and northern Iowa during May June '96 in company with Mr. J. H. Brown, I noticed a male mounted on a dead reed uttering its chitter which so much resembles that of the Chipping Sparrow, at Bear Lake, Freeborn Co., Minnesota. This lake is only four miles north of the north line of Winnebago county, which leaves strong room to surmise that it might be found in Iowa at this season of the year. This occured on the 29th of May, which would be about the time for young birds. On two or three other occasions I heard their chitter at Rice Lake, Faribault county and Heron Lake, Jackson county. These counties lie north of about the middle of Iowa from east to west. Hence it would be very reasonable to decide that it passed through Iowa on its migrations.

So much for Iowa. Now for the summer haunts of our little friend. The early part of the last two collecting seasons and the whole of the last, I have spent at Madison, Wisconsin, and though school duties have occupied most of my time, I have been able to get out a little, but of course any thorough study has been out of the question.

The Swamp Sparrow first puts in an appearance in the early part of April. First noted April 15, '96 and April 11, '97, but as I was not out to their haunts every day there is a chance for earlier dates. Soon after they arrive the marshes about the lakes are full of them. They keep up a constant singing, dozens within earshot at the same time. Their song almost exactly resembles a Chipping Sparrow's, but is perhaps a little louder and sweeter, lacking the sad monotony characteristic of the Chipping Sparrow. I have never found them at any time in any other place than the high grass and rushes about water.

My acquaintance with their breeding habits has been confined exclusively to one large arm of Lake Mendota, Madison, Wis., which finally

loses itself in an extensive marsh. Following the line of shore between the lake and marsh and a rod or so back from the waters edge, a road has been graded across the marsh. An improvement company have obtained control of the road, macadamized it, and it is one of the popular and much used drives out of the city. My acquaintence with their nesting might be still further limited to a strip three rods wide on either side of the road. But in this strip these sparrows are certainly very abundant breeders. In one place I took five nests of eggs from a strip on the lake side of the road not over four rods long.

After a great deal of chattering and quarrelling, they finally settled down to active nesting operations about the first of May. Along the sides of the above mentioned road there is a rank growth of rushes, or rather once was. These rushes, now dead and yellow, are thickly matted and bent over so as to form a very obscure cover for the nests, and it is in these that most all my nests have been found. In 1896 four nests were obtained within reach of the road. All but one were securely concealed in a bent over matted bunch of rushes, the only "give away" being a few grasses left about the approach to the nest in building. These grasses were the same that grew abundantly among the rushes, but a sort of order in the way they lay attracted ones attention. The birds were very hard to flush, seldom leaving until one began to tear the bunch of rushes to pieces. From the three above nests three sets of five eggs were secured, one May 13, 1896, and two May 18th, all with incubation barely begun. The fourth nest, however, differed materially in situation. It was in a rather open place, where the stiff three cornered reeds we are all familiar with had been cut off a foot above the water and still remained standing. The nest, within a yard of the wagon track, was attached to a bunch of these rushes, after the manner of a Red-wings: It was not only visible but conspicuous from the road, the eggs being plainly seen by one riding by. Five days after the first egg was laid, I took three eggs on the 20th of May. The nest was about six inches above the water, as were the three above mentioned. All the nests found so far were practically identical in composition, composed principally, as I hinted above, of the semi-coarse grasses near at hand. They were lined with fine round stems, only in one or two instances was there a suggestion of horse hair.

In '97 I was able to cover a slightly larger area with boots, but although I wandered over a large marsh and saw Swamp Sparrows not unfrequently acting as if they had nests, I was unable to find any nests over three rods from the above mentioned road. This, I take it is due to the fact that these patches or dead rushes, which seem to be so congenial to the sparrows only abound in the vicinity of the road, while further away one finds a sea of grass, in which it is almost impossible to locate a nest, except by chance, unless the bird is flushed. This spring, '97, in all, six nests were examined, of these all but one were well concealed under the bent over rushes, the other being in the situation of a Red-Wing's and farthest from the road, about three rods. Of these, on May 19th, one set of two eggs of the sparrow with two Cow-Birds' eggs and another of four Sparrows' were taken, incubation well begun. On May 22nd, two sets of

three with incubation about one-fifth, and on May 28th, a set of five fresh eggs were taken. The sixth set, one of five eggs, taken May 26th, was two old to save.

On two or three occasions when I have been near other marshes near Madison, I have noticed the songs of the males, seemingly as abundant as in the marsh I was acquainted with. Hence, I feel safe in saying that the Swamp Sparrow is an abundant breeder in all the marshes about Madison.

Now for a brief summary: The first set of eggs is laid between the middle and last of May. Of the ten sets examined, five were of five eggs, three of three, and one of four. The other contained two Sparrows' and two Cow-Birds' eggs. Whether they keep on breeding all summer, as Wilson says they do in Penn., I am of course, unable to say. Pethaps I owe something of an apology to the association for giving notes from out the state, but they are at least about a bird which occurs within the state.

DISCUSSIONS.

Mr. W. W. Loomis opened the discussions by stating that he had found one nest of the Swamp Sparrow in Allamakee county about the 20th of May, it was placed on the bank of a stream, perhaps two feet from the water. Mr. Wilmon Newell had noted one specimen in Story county about the middle of April, but had not found the species nesting there.

Mrs. M. A. Triem found one nest in Deleware county, it was placed on the ground by a small bush and not far from a stream. Mrs. Triem also stated that on several occasions she had seen old birds in the nesting season and was positive that the nests were not far away, although she was unable to find them.

Mr. Brown says that he has never found either the Swaiup or Song Sparrow nesting in his locality, and Mr. Savage gives the same assertion. Mrs. Triem rises to state that the latter speces nest abundantly near Manchester.

Mr. Newell informs us that the Song Sparrows are not rare in Story county, but has never found them nesting. He thinks that perhaps the Nelson's Song Sparrow may be found as a emigrant in the state.

INTERESTING NOTES.

BY ARTHUR A. JEFFREY

Being a member of the association, I feel it my duty to add what I can to the interest of its little paper and, as it is beyond my powers to discourse at length on any one species or family of birds, or fill page after page with their scientific names, I will simply set down those of my notes taken during the past season that I think will be of intersst to my brother ornithologists.

The House Wren is, in my estimation, the most industrious little bird we have. They never seem so happy as when they are employed building a nest or feeding their young. I have known many cases where a pair of

these little "busy-bodies" have demonstrated their passion for nest-building by building two nests in the same box and of course could use only one of them. That summer a pair took possession of a Martin house containing four rooms and not only did they appropriate the lower floor to their use but also the garret, filling the two lower rooms completely with rubbish and the upper ones nearly so.

After the Wrens had left last fall I examined the various nests about the place with the following results: In one nest I found, besides the usual quantity of sticks and strings, the following unusual material: two six-penny nails, two pieces of No. 12 wire about three inches long; one piece of No. 15 wire two inches long, seven shingle nails and three one-inch brads. In another nest I found fifteen shingle nails, one one-inch brad and a six-penny nail.

A Tame Goldfinch—I have often read of wild birds becoming so tame in their natural haunts that they would eat from a person's hand or alight on his shoulder. But to these stories I never attached much credit until last summer when I was fortunate enough to obtain the confidence and trust of a female American Goldfinch. It happened in the following manner: On the morning of the seventeenth day of August as I was driving the horses from the pasture my attention was attracted by a small nest in a large thistle (which I am ashamed to mention as being in our pasture) and on examination, I found it was occupied by its owner, a female American Goldfinch. Seeing that she did not seem much frightened, I approached slowly, imitating as nearly as I could the Goldfinch's plaintive love-call—sw-e-e-e-t, sw-e-e-e-t. In this manner I was able to approach within two feet of the nest, when she became unable to stand the sight of me any longer and flew a few rods from the nest, disclosing five pale blue eggs. Thinking it best policy to disturb her no

AMERICAN GOLDFINCH
Drawn from painting by Wm. G. Savage

longer that time, I went on after the horses and returned to visit her the next evening and met with great success for this time she allowed me to approach in the same manner as before and stroke her feathers gently with my forefinger while she kept her place on the nest. After this I visited her nearly every evening and we became so well acquainted that she would eat bits of apple, cake, sugar and other dainties from the end of my forefinger and allow me to gently place my finger beneath her and raise her from the nest, at which she showed no signs of fright but seemed extremely anxious to get back on her eggs. This little bird was a most careful "nest-wife" for after each meal taken from my hand she would poise herself on the edge of the nest and carefully pick out all the crumbs which had fallen into it. She and and her family left for better feeding grounds and I have seen nothing of her since. I think her extraordinary tameness can easily be explained by her great love for her eggs and nest which at first led her to allow me to touch her, and after a few days of this forced endurance she found that she need have no fear of me and became actually tame.

On the 20th day of September, while nutting I found a quail's nest containing the shells of eleven eggs from which the young quails seemed to have just hatched. These shells were opened at the larger end by a ragged cut, the edges of which were turned in and which would have been a complete circle had not a hinge of about a quarter of an inch's width been left on one side, the tough inside skin acting as a hinge. These openings looked very much as though the mother quail had made them, and to add to this evidence was another egg still containing a young quail and it was opened as were the others, and on examination I found that the young quail's bill was packed tightly in the shell a little below the cut, which showed that the young quail hadn't opened it as is the belief of many naturalists. But against this evidence there was still another egg in the nest which contained a dead bird and it *was not* opened as were the rest. The only excuse I can make for this is that the old quail not hearing any chirp from that egg thought it did not need to be opened yet.

ARE YOU WATCHING THE BIRDS.

Through the courtesy of Dr. C. Hart Merriam, Chief of the Biological Survey, Washington, D. C., migration blanks with return penalty envelopes were mailed to every member of the Iowa Ornithological Association. It is desired that these blanks will be filled out with our migration notes and sent to Dr. C. Hart Merriam, Washington, D. C. A duplicate of our migration notes is to be mailed to Carl Fitz Henning, Chief of the Migration Department, Boone, Iowa.

It is to be hoped that every member of our association will take enough interest in this branch of our ornithological studies to enable us to make a creditable report on the migration of birds in the State of Iowa. Migration notes from members of the association living outside of our state are desired. Let every one make a full and complete report.

I have received several encouraging letters from members of our association and feel confident of good results if we all work together.

Would be pleased to hear from my fellow members.

Yours in the Migration Work,

CARL FRITZ HENNING.

922 Eighth Street. Chief of Migration Department. Boone. Iowa.

NOTES AND NEWS.

The first blue birds arrived at Boone. Iowa, March 5th. They are welcome visitors at "Bird's Home."

On the morning of March 25th. Mr. Wm. Bass of Boone county. shot a Swan on the Des Moines river near Centerville. Iowa. The Swan was purchased by a Boone party and mounted by Carl Fritz Henning.

Monday, March 28. was a good day for hunters. The day before had been a regular blizzard in this section. starting in with rain and sleet in the morning, it soon turned to sleet, hail and snow. until by night the ground was covered several inches deep. Hundreds of Ducks. Brant. Snow Geese and several flocks of Swans started south and many sought shelter from the storm along the Des Moines river in the protected bottoms. A fine Greater Snow Goose with rusty tinge on head. neck and breast was collected by Frank Brown and kindly donated to the "C. F. H." collection. The Snow Goose was alone on the river and had apparently been separated from his companions during the storm. Many Pintails, Mallards. Widgeons and Gadwalls were taken at various points throughout the county.

April 3rd. Harry Myers. Boone. Iowa. collected a fine set of Barred Owl eggs. The eggs. two in number were placed in a hollow white oak. 35 feet up. Mr. Myers also succeeded in getting the owl.

On the following day. April 4. Mr. Myers had another streak of luck and after a hard climb of 65 feet he got up to a large nest of Red-tail Hawk. Two beautifully marked eggs were the result of his shinning the basswood.

Robins are building at Birds home. Golden-winged Woodpeckers courting. H.

Our fellow member. Amon R. Shearer. of the Galveston Medical College. writes under date of April 4th that the whole body of warblers have arrived in force at Galveston. Texas. The first Ruby-throated Hummingbird arrived their March 25th. also Kingfishers. Herons. Sparrows. etc. Mr. Shearer is the bosom friend of our Chief of the Migration Department and has promised Mr. Henning migration notes from the sunny south.

Mr. A. P. Godley. of LeGrand. Ia.. writes that on Feb. 15th he identified a Whistling Swan which had been shot on the Iowa river that day. He thinks it a very early date to find this species so far north. With this exception and that of a Yellow-shafted Flicker shot Feb. 20th. he had not seen any migrants up to date—Mar. 2nd.

We like to receive letters which read like this:

"I am keeping extensive field notes this year and will transfer my migration records to the blanks which I received a few days ago. Wishing you success this season, I am, yours in the work,

V. L. Beed, Hampton, Iowa.

Mr. Lynds Jones, of Oberlin, Ohio, informs us that he pushed the study of winter birds during this winter at his station, and found it very profitable and not unpleasant. He found both Horned Larks and Prairie Horned Larks there in flocks together. Mr. Jones hopes that the Horned Larks will receive careful treatment by the I. O. A. members as he feels sure that Iowa should have at least four of the forms. He has taken two specimens near Oberlin which are nearer *leucolaea* than anything else. Likewise the Shrikes—they have found both Loggerhead and White-rumped in about equal numbers with many intermediates. The Iowa Shrikes, he thinks, are probably likewise mixed.

Mr. H. J. Giddings writes that he noticed in the October Iowa Ornithologist there was some discussion at the Manchester meeting concerning the prevailing form of the Water Thrush in the state. Near Sabula he has met with none except Grinnell's Water Thrush. This species being very abundant at times, but he has never found their nests. This being the most eastern part of the state, he assumes that this is the prevailing form over most of the state. On Nov. 17, 1897, a female American Scoter was shot near Sabula out of a small flock and brought to Mr. Giddings to be mounted. This is his first record of the species and the old hunters claim that it is the first specimen ever taken near there.

On May 3d, 1897, I found a nest of six young White-rumped Shrikes Birds about 10 days old. This is my earliest date on record. On July 6th, 1897, I and a friend collected a set of four Red Starts, incubation just begun—a very late date for Red Start. John. J. Skinner.

Since our last issue the following persons have been admifted to active membership in the I. O. A: Miss J. E. Hamand, Schaller; Messrs James L. Johnson, Ames; and Harold Odle, Hull. Also to associate membership, Mr. C. L. Passmore, of Iola, Wis.

New Books and other publications will be reviewed in this department. Authors wishing publications reviewed should send them to the Editor, who will examine them personally and give them due consideration.

"Bird Neighbors," An introductory acquaintance with one hundred and fifty birds commonly found in the gardens, meadows, and woods about our homes, by Neltye Blanchan, with introduction by John Burroughs, and 50 colored plates. New York, Doubleday & McClure Co., 1897. Cloth $2.

This unique book of 234 pages ought to be a great help to the young student of birds, and enables every one to know their "bird neighbors."

It is, as John Burroughs says in introduction "a reliable work and is written in a vivacious strain by a real bird lover and should prove a help and a stimulus to any one who seeks by the aid of its pages to become better acquainted with our songsters. The descriptions are free from technicalities. For the beginner who wishes to get acquainted with his or her neighbors it is hard to find a better book with so many colored plates at so small a cost. "C. F. H."

"Heligoland as an Ornithological Observatory, the result of fifty years experience," by Heinrich Gaetke, translated by Rudolph Rosenstock, M A. Oxon. Edinburgh, David Douglas; 10 Castle street. 599 pages, 23s, 6d.

Herr Gaetke's "Heligoland" is beyond question a remarkable book, it was originally published in German, and in 1895 received the compliment of being made accessible to English readers. An ornithologist in high standing has pronounced it to "one of the most original, most remarkable and most valuable books ever written about birds." Herr Gaetke's book consists of three parts, entitled respectively "Migration of Birds" (pp 3-148). "Changes in the Color of the Plumage of Birds without Moulting," (pp 149-164), and an "Account of the Birds Observed in Heligoland" (pp 165-588).

Part I is divided into nine chapters. The first chapter treats of the "Course of Migration generally in Heligoland." (pp 3-23

II. Direction of the Migration Flight (pp 24-45).
III. Altitude of the Migration Flight (pp 46-62).
IV. Velocity of the Migration Flight (pp 63-73).
V. Meteorological Conditions which Influence Migration (74-99).
VI. Order of Migration according to Age and Sex.
VII. Exceptional Migration Phenomena (pp 114-130).
VIII. What Guides Birds during their Migration (pp 131-142)?

IX. The Cause of the Migration Movement (pp 142-148).

Heligoland is a small island at the mouth of the Elbe in the North Sea, about fifteen miles distant from the mainland. It is triangular in outline, slightly over a mile in length, but much less than a square mile in area. The little island lies at the intersection of two prominent lines of migration, the one a north and south route, the other an east and west route. Herr Gaetke has studied the subject of migration of birds and bird life at at all seasons at his great observatory, with little cessation or interruption day after day and night after night for the last fifty years. He tells us and we can realize the fact that Heligoland stands pre-eminent as an ornithological observatory in the west of Europe. The number of birds observed in Heligland at 398. We owe much to Herr Gaetke's devotion to ornithology for the important contribution to our knowledge of the ways of birds. "C. F. H."

"Song Birds and Water Fowl." by H. E. Parkhurst, illustrated by Louis Aglssiz Fuertes, New York. Chas. Scribner's Sons, 1897.

Those who have read Mr. Parkhurst's "Birds Calendar," will not be disappointed with his new work, "Song Birds and Water Fowl."

The contents of this handsome little volume of 286 pages, are:

A Bouquet of Song Birds.
Water Fowl.
A Bird's Eye View.
Mistress Cuckoo.
Sea Swallows.
Bird's Nests.
At the Water's Edge.
Lake George.
A Colony of Herons.
Earliest Signs of Spring.

The 18 full page plates are the work of Louis Agassiz Fuertes, our Audubon of today. We hope that Mr. Parkhurst will soon favor us with another book on our feathered friends. C. F. H.

"Birds" Nature Study Publishing Company, Chicago, Ill., Monthly, $1.50 per year. "Birds" is a monthly magazine, illustrated by the new and wonderful process of color photography.

With the January number "Birds" enters upon its second year. It has eight full page illustrations and twenty-four pages of text.

A short life history is given of each bird described, one to please the boys and girls, the other for adults. This is a most excellent feature of the magazine and is meeting with wonderful success, a fact shown by its large number of subscribers.

The plates and birds described in the January number are: Crowned Pigeon, Red-eyed Vireo, Fox Sparrow, Bob White, Passenger Pigeon, Short-eared Owl, Rose Cockatoo and Mountain Patridge. Every one of these colored plates in the January issue is true to life, that of the Passenger Pigeon is an exceptionally fine plate and the best I have seen in the last five years. The publishers are entitled to success, and the subscription list shows that their efforts are appreciated. C. F. H.

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APRIL, 1898.

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WANTED—Walter Raine's "Bird Nesting in Northwest Canada," Goss, "Birds of Kansas," and Vol. I of the Nidiologist. Have to offer in exchange for the same, specimens, or books on Ornithology. Send cash offer or list of specimens desired and inclose stamp for reply. Your chance for a good bargain. Carl Firtz Henning, Boone, Iowa.

WANTED—A good second hand copy of Hornaday's "Taxidermy and Zoological Collecting." Write at once, stating condition of book and lowest cash price. C. L. Passmore, Iola, Wis.

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WANTED—Geological Reports of Ia, Ill., Neb., Ind., Ohio, Mich., and N. Y. Any one having any of the above, for sale please correspond with Prof. J. E. Savage, Iowa City, Ia.

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A number of premiums were offered last year and the result was so satisfactory that we have decided to make a larger offer now. **We want 500 New Subscribers** before the next issue. Note the magnificent offer made by Wilmon Newell, of Ames, of a finely mounted

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to the person obtaining the largest number of subscribers. This premium will not be given to any person securing less than forty subscribers. Again, Mr. Carl Fritz Henning, of Boone, makes anotheb big offer as follows: "To the person securing the largest number of subscribers to **The Iowa Ornithologist** I offer the prize.

$5.00 Worth of Sets

including a set of Krider's Hawk, ½, which was offered by Pres. Brown last year. and which I had the pleasure of securing. The person receiving the prize offered by Mr. Newell, however, will be barred from receiving this one" In both the above offers the securing of a new active member to the Association shall count as two subscriptions and the securing of a new associate member. as one subscription. Both offers will close June 1, 1898. Show this issue to your friends and you will have no trouble in securing subscribers Go to work **at once**—do not wait until someone else has secured all the subscribers in your neighborhood.

Iowa Ornithologist, Salem, Iowa.

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AND LIST TO NATURE'S TEACHINGS."

The Iowa Ornithologist.

VOL. 4. NO. 3.

JULY, 1898.

A Quarterly Magazine

—DEVOTED TO—

Ornithology and Oology.

PUBLISHED FOR
The Iowa Ornithological Association.

40 CENTS PER YEAR.

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DAVID L. SAVAGE.

The Iowa Ornithologist.

Vol. IV. JULY, 1898. No. III.

First Record of the Turnstone.

(Arenaria interpres (Linn.)

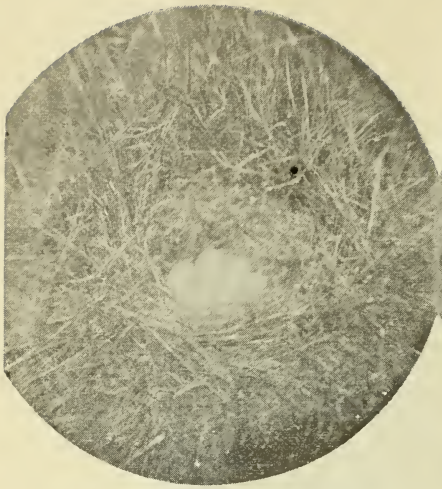
In Iowa. (May 21, 1892.)

We had spent a pleasant day's outing among the beautful lakes which abound along the Mississippi, in Illinois, opposite Burlington. Had admired the fields and forests now decked in virgin green and listened all day long to the chorus of birds, which were ever pushing northward. toward their favorite summer homes.

Evening found us gliding homeward. Just as we passed the Burlington bridge which spans the great "Father of Waters" Dr. Poppe who was in the boat preceeding ours called my attention to a pair of birds feeding on the railroad track, which was now partly submerged on account of the prevailing high stage of water. In my eagerness to approach them I frightened them away and owing to the unsteady motion of the boat I missed both birds. Not recognizing the birds, my eyes naturally followed the pair with regret. We saw them cross the river, circle over the city of Burlington, swing about, then wheel again in Jacksnipe fashion, and finally return in a bee line, to the place from which they had been frightened. This time I took the precaution to land and approach them more carefully which resulted in the capture of the only two Turnstones which have ever come under my obversations in the Mississippi Valley.

These birds were killed in Illinois, but will have to be added to the list of Iowa birds. as we also observed them in Iowa.

—Paul Bartsch, *Washington, D. C.*



Nest and Eggs of the Blue winged Teal.

Nest and Eggs of the Marsh Hawk.

Through Naturalist's Eyes.

BY DAVID L. SAVAGE.

Paper read before the Third Congress of I. O. A.

The breath of autumn fans my brow,
  Her voice is in my ear,
And earth in all its lovliness,
  Proclaims her presence near;

And I rejoice that round my way,
  That's often dark and dim,
God sends so many messengers
  To draw my soul to Him.

Nesting time is over. Now comes the most interesting season of the year to the bird lover; when the parent birds bring forth their younglings, all unused to the ways of the world, and carry on their training before our eyes. Very few, perhaps, are aware that most of these youngsters are dressed in different costume from their elders. When the young birds come forth even the expert ornithologist is at times sorely puzzled to fix on the catagory to which some of them belong. Yet there are usually some characteristics by which their places in the *avi fauna* may be determined. As a rule, the plumage of young birds is more striped and mottled than the mature specimens. I said that nesting time was over.

Perhaps a half-dozen species are busy with second broods.

But did I not forget that charming, sweet-voiced goldfinch (*Spinus Tristus*) who has just commenced the cares of housekeeping? Nay, the pretty mansion in the elm is not yet completed! The courtship of the bird of July is a charming sight. What a time he has courting that little spouse of his! It would seem that these sombre maidens are harder to woo than the others of their sex. And yet writers would have us think that this delay in nesting is on a account of a late coming insect necessary for the welfare of the nestling, or for the thistle silk, which alone makes a fit cushion for his delicate spouse and her "wee babies!"

THE GOLDFINCH.

By no means does Master Goldfinch cease evincing affection for his mate when nest-building commences. From morning till night you may here his joyous notes. He is singing as he accompanies his mate on almost numberless excursions across the meadow to the pasture land, where the overworked or indolent farmer has left the thistle to gain a stronghold; singing as he returns with Lady Goldfinch, who has her beak loaded with "thistle silk" for the nest; singing as, perched upon the topmost twig of the elm, he watches her weave that rude material into an artistic structure

which is soon to be called "home." After watching the bird for a few hours we are led to exclaim with the poet,—

"Where do you hide such a store of delight,
O delicate creature, tiny and slender,
Like a mellow sunbeam bright.
Overflown with music tender!"

The nest is completed in a surprisingly short time. In seven days the eggs are hatched, and ere a fortnight has come and gone the little ones are full-fledged birds. Now the fond father leads the happy family from one feeding ground to another with tones of authority as behooves a father of five children.

THE SCREECH OWL.

Another bird which makes himself conspicuous at this season by his vocal aspirations is the screech owl (*Megascops asio*). He does not condesend to vocal Articulation until the little screechers are old enough to imitate. Then old and young betake themselves to a small grove or woodland and, when darkness conceals them, one and all take up the most unearthly strain that ever proceeded from the throat of a bird. At a loss to know what to call the sound writers have termed it "screeching." And that, though perhaps as good as any other Anglo-Saxon word, gives but a faint glimmer of the original weird and grotesque sound.

There is no bird that has claimed more of my attention than this night wanderer. I have found quite a number of screech owl nests, placed in the hollow of trees. Never would rapping on the trees bring the old birds out. Climbing to the nests I have invariably had to remove them with my hand. When placed upon a limb of the tree, they would sit quiet with eyelids nearly closed until I had examined the cavity to my satisfaction, then would permit me to replace them on the eggs, not uttering a sound during the whole performance. Thinking I might gain a closer acquaintance, I kept two for pets in my den for sometime. During the day they were all stillness and gravity, other than snapping their bills when I approached. No sooner was the sun set than their whole appearance became lively and animated; they ate with great greediness any food offered them; flew around the room with the silence of thought and, perching, moaned out their melancholy notes, which reminded me of the shivering moaning of a half-frozen puppy. I felt as though they had some hidden sorrow over which they were continually brooding; so I released them, thinking perchance they might find consolation in the association of their kind. But only last night I heard them uttering the same whining sound along the banks of a wooded stream.

About the same time I heard the owls, a yellow-billed cuckoo (*Coccyzus americanus*) struck up a chorus of *kow*, *kow*, *kow*, *kow*, *kow*, —the first notes slowly drawn out, then increasing in rapidity until closing with a muffled sound. According to tradition "there will be a rain in less than twenty-four hours." No appearance of a storm as yet!* Perhaps this is a young bird that has not developed into a good weather prophet. Not infrequently this bird indulges in its predictions at night. During the nesting season quite a number of our birds occasionally indulge in night solos. I have heard the brown thrasher, the black-throated bunting, and the field sparrow start up a tune, long after most of the birds had wrapped themselves in slumber; at such hours they sing only fitfully and by brief snatches.

But to return to young birds:

Peep, peep, in a prolonged whistling tone, comes from the edge of the field towards the woods. The gentle housewife thinks surely her young turkeys have not wandered thus far from the house, and hastens to the door to listen more closely. Perhaps she takes her bonnet and searches the fence corners carefully on that side of the

*Written early in September.

field. She never thinks of looking in the top of the large oak for the producer of these supposed familiar notes. This is the first rude element of the red-tailed hawk's scream. There are the old birds soaring high in the blue; every now and then we hear their piercing *whe-air*.

The world is a jargon of young voices. Morning, noon and night the groves resound with impetuous cries, which indicate the presence of hungry mouths to be filled. The junior Baltimore orioles are lending their share to the monotone. Two broods were reared in the grove and now as they find that the power of aerial navigation is theirs, no tree is large enough for two of them! Stationed in different sections of the grove, they each vie with the others in making the loudest demonstrations for food. The wood pewee (*Contopus virens*) has her nest in one of the hickory trees. It is placed on a horizontal limb some fifteen feet from the ground. The two little inmates are not quite able to fly. The nest is almost a model structure. The grass and fine shreds which form the framework are beautifully decorated with lichens. The mother has a novel way of securing food for her young. Perched on a dead limb only a few feet from the nest, she waits patiently till an insect of the fly characteristics comes her way; then, quick as thought, she takes a circle, you hear the snap of her beak, and she regains her perch, only to repeat the operation in a few moments. Occasionally she goes to the nest to give a portion of the food to the young, which are exceptionally quiet for members of the avian class. Perhaps they are lulled to sleep by the continuance of the low *sir-ree-ee-ee-ee-e* of the mother, which is probably to them what the "Rock-a-by-baby" was to us.

This species greatly resembles in form and habits its larger relative, the phœbe (*Sayornis phœbe*), only being of a more solitary nature. The phœbe, with which every schoolboy is familiar, seems to have made a complete reformation from its primitive habits. It once was a retired bird, nesting on the sides of rocks of high cliffs along our streams. Now every bridge along our public highway has its phœbo's nest—every farmyard in which are a number of outbuildings possesses the same.

I have always been some what partial to low thickets of undergrowth for studying my feathered friends. Less than a month ago these copses were serenaded with the richest melody. I step into a thicket of thornbushes, and at once am greeted with angry

cries and chirpings from two yellow-breasted chats (*Icteria virens*). Knowing that I must be in close proximity with the nest, I begin scanning closely the bushes near by. I soon find the nest, which is in a thornbush about four feet from the ground. Two young, nearly grown, are the only occupants. This is undoubtedly a second brood, as four and sometimes five constitute a brood.

The chat is an elegant bird, both in form and colors. Color above, light olive green; beneath, bright yellow; beak black and strong. His voice is very loud and not unmusical during the spring months. No sooner do you enter his retreats on a June day than you are serenaded with a variety of notes which were it not for the inferior quality would equal the mocking bird—the quan-

THE YELLOW-BREASTED CHAT.

tity is not lacking. At this season the chat has a peculiar idiotic flight. With legs extended, head drooped and rapid motion of his wings, he makes an awkward zigzag flight, giving one the impression that he is liable to fly to pieces. When young birds claim his attention he proves that he possesses good sense and is a faithful attendant. Continuing my walk in the thicket, my attention is attracted by the loud cries of a young bird. It is a cowbird (*Molothrus ater*) the only occupant of a yellow warbler's (*Dendroica æstiva*) nest. The bird is nearly fledged, being now much larger than the little warbler who is carrying its food with all the tenderness of a true mother; while the cowbird that laid the egg

is roaming the fields in company with a number of her kind, evincnig no concern whatever of her offspring.

The only species coming under my observation that objected to the cowbird's egg in its nest is the notorious kingbird. For a week I made daily visits to an old orchard where a pair of kingbird's had their nest in one of the apple trees. I watched them as they brought the last material for the nest and counted the eggs each morning as they were laid--one, two, three,—but on the morning when I expected to find the fourth, on approaching the tree I saw that a stranger was on the nest. I cannot say whether I or the stranger saw the other first. Nevertheless Lady Cowbird made short work of slipping off the nest and reaching the nearest woodland. She not even paused long enough to give me a morning salutation as the kingbird was in the habit of doing. Upon investigation the nest was found to contain three of the kingbird's eggs and one of the cowbird's. Returning in about an hour to see how matters were at the kingbird home, lady *tyrannus* was on the nest and all seemed quiet. But lo! the poor cowbird egg was not in the nest nor under the nest, nor could it be found any where. Undoubtedly Master Kingbird had removed it. He would not allow his beloved mate to be converted into a foster parent.

Knowing that in order to find life in any abundance one must traverse some water course. Life in all forms is most abundant near water. And especially is this true during the long sultry days of August when the freshness of the deep shady ravines is sought for as a retreat from the burning heat. I follow along a small stream until it runs into the main creek. Not far away is a "palace of reeds" built by nature's own hand, on a low bluff of the creek's east bank. This palace of reeds is handsomely furnished with a mossy log for a sofa. I find quite a number of feathered folk at home. They are all busy preparing the morning meal.

The blue-winged teal (*Anas discors*) has her family of seven pretty children out a few yards in the marsh, teaching them how to swim and secure their own food. They seem to be having a jolly good time and do not notice that there is a stranger at their door. The nest in which these little ones were hatched is not far away, a snug affair, tucked neatly away among the reeds and grass and formed of fine dry grass, lined with a little gray down.

Yonder on a dead snag is a marsh hawk (*Circus hudsonius*). His little ones have been large enough to shift for themselves for

some time. And in what marsh they feed is now unknown. But he prefers to stay near the old home until approaching winter drives him to a southern clime. His nest was on higher ground to the north where the ground is covered with sticks, twigs and small branches, and grown up with young poplars and hazel of two or three feet in height. Five is the usual number in a marsh hawk family.

AMES 1898.

September 21, 22, and 23.

The Fourth Annual Congress of the Iowa Ornithological will convene September 21, 22, and 23, 1898 at Ames, Iowa.

A cordial invitation is extended to all interested in our work to be present. The leading Ornithologists in the state will be there and this will undoudtedly be the greatest and most successful of any meeting thus far held in the history of the association. The reading of papers upon the various phases of our science and the discussion of the same, will be the main features of the congress.

At our last congress the work of our association was divided into a number of committees, and the chief of each committee was authorized to commence, at once, an exhaustive paper upon his department head—and this to be read at the next congress. Thus these persons have had time to make ample and thorough preparation for their papers, and they will undoubtedly be able to present much valuable scientific material.

By no means, is it to be understood that papers are to be restricted to these members, but all members of the Iowa Ornithological Association and all ornithologists are invited to prepare a paper for this congress. Send the subject of your paper, and state the length of time it will occupy, to Wilmon Newell, Ames, Iowa, by the 20th of September, so that the program may be arranged.

The ornithologists at Ames are sparing no time in preparing for the congress: They write that the Ornithological Museum of the Ames Agricultural College has recently undergone a complete rearrangement, now making this extensive collection readily accessible to both general and scientific students. This will be open during the entire congress.

For any further information address—

WILMON NEWELL, Ames, Ia.

The Editor's Message.

Gigantic co-operation is necessary in this age of the world. Less than a century ago Audubon and Wilson traversed the wilds of our continent and found new birds on every hand, new species to be described, studied and potrayed.

At the present time, I am justified in saying, that from Atlantic to Pacific, there is not one species which has not been discovered. Morever there is much that is highly interesting which remains to be learned concering the life history of our birds. It takes much time and careful study to find out and determine new facts concerning the birds. Such investigation can be carried on to great advantage by a number of students in certain regions banding themselves together and combining the results of their observations. To this end the Iowa Ornithological Association was organized. It has completed its fourth successful year. Its members have stood for the accumulation of ornithological literature on the birds of our state and for the protection of our feathered friends. At present we stand firmer than ever before, and look upon a future of unbounded possibilities.

Co-operation is the secret of our success. The IOWA ORNITHOLOGIST is here to protect the interests of our winged creatures and to publish valuable scientific material in lasting form.

In appreciation of the honor which has been conferred upon me by the fellow members of the I. O. A.—by thrice appointing me to the Editor's chair—I wish to heartily thank the subscribers and members for their words of encouragement and co-operation.

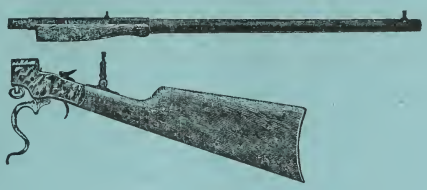
Other duties involving upon me make it my unpleasant task to tender my resignation as Editor of the IOWA ORNITHOLOGIST.

Linked with the natural regret at the severing in a way of old ties, fully valued by me, I feel assured the place will be filled by one quite as competent, as there are many in the association who possess more literary ability and push than the former editor. Rest assured, then kind reader that the IOWA ORNITHOLOGIST will not only retain all its present characteristic and original features, but will continually add new ones of unusual interest.

While laying aside the editorial pen, I shall occasionally write upon my favorite subject and when indulging in such a pleasurable pastime, I shall remember my first love, the IOWA ORINTHOLOGIST, and hope that my many friends and former contributors will follow the example and help along the good work.

Yours truly;

DAVID L. SAVAGE.



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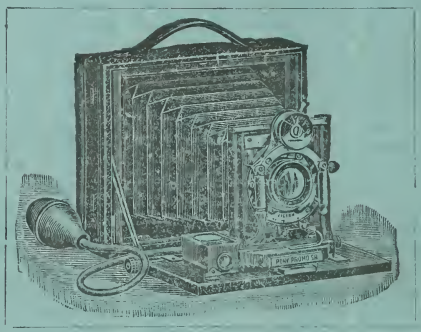

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